

Environmental spy



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Exile TO
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THE *Lotos* EATERS
A Complete Novelet
By **BOLLING BRANHAM**

15¢ Thrilling WONDER Stories AUG. 1944

BOMB HITS CROWDED ENGLISH HALL—GAS

PERILS RESCUERS...

A true experience of Frederick Mockford, Incident Officer, Deptford District Civil Defense, London... as cablegrammed by a war correspondent.



DISTRICT POST INFORMED ME

HIGH EXPLOSIVE BOMB HIT JUST BEFORE

CLOSING TIME. BOMB WENT THROUGH

BILLIARD ROOM, CARRYING TABLES

CLEAR DOWN TO CELLAR.



I GOT MY SQUAD ON SPOT WITHIN FEW

MINUTES. ESCAPING COAL GAS OVERCAME

SEVERAL RESCUERS AND MADE FLASHLIGHT

SAFEST AVAILABLE LIGHT. RESCUE PARTY

WORKED THROUGH NIGHT UNTIL DAYLIGHT, BOMBS

CONTINUING TO ROCK BUILDING

I SENT SOS CALL FOR BATTERIES.

THANKS TO FACT FRESH ONES WERE

AVAILABLE FOR JUST SUCH EMERGENCY WE

WERE INSTRUMENTAL SAVING LIVES

AT LEAST 15 PEOPLE.



Keep your batteries ready for emergencies!

Mr. Mockford's experience—like many such others that have come out of England—is typical of the many emergencies that call for the use of a flashlight. Any kind of open flame would have ignited the coal gas, blocking attempts at rescue.

For your own protection, as well as to conserve materials vitally needed elsewhere in this war, follow the suggestions and instructions of your local Defense Council. Reduce the use of your flashlight to a minimum. Make the batteries last longer!

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How to Make YOUR Body Bring You FAME

... Instead of SHAME!

ARE YOU
Skinny?
Weak?
Flabby?

Will You Let Me
Prove I Can Make You
a New Man?

I KNOW what it means to have the kind of body that people pity! Of course, you wouldn't know it to look at me now, but I was once a skinny weakling who weighed only 97 lbs. I was ashamed to strip for sports or undress for a swim. I was such a poor specimen of physical development that I was constantly self-conscious and embarrassed. And I felt only HALF-ALIVE.

But later I discovered the secret that turned me into "The World's Most Perfectly Developed Man." And now I'd like to prove to you that the same system can make a NEW MAN of YOU!

What Dynamic Tension Will Do For You

I don't care how old or young you are or how ashamed of your present physical condition you may be. If you can simply raise your arm and flex it I can add SOLID MUSCLE to your biceps—yes, on each arm—in double-quick time! Only 15 minutes a day—right in your own home—is all the time I ask of you! And there's no cost if I fail.

I can broaden your shoulders, strengthen your back, develop your whole muscular system INSIDE and OUTSIDE! I can add inches to your chest, give you a vice-like grip, make those legs of yours lithe and powerful. I can shoot new strength into your old backbone, exercise those inner organs, help you cram your body so full of pep, vigor and red-blooded vitality that you won't feel there's even "standing room" left for weakness and that lazy feeling! Before I get through with you I'll have your whole frame "measured" to a nice new, beautiful suit of muscle!

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No "ifs," "ands" or "maybes." Just tell me where you want handsomeness, powerful muscles. Are you fat and flabby? Or skinny and sawy? Are you short-winded, peevish? Do you hold back and let others walk off with the prettiest girls, best jobs, etc.? Then write for details

about "Dynamic Tension" and learn how I can make you a healthy, confident, powerful HE-MAN.

"Dynamic Tension" is an entirely NATURAL method. Only 15 minutes of your spare time daily is enough to show amazing results—and it's actually fun. "Dynamic Tension" does the work.

"Dynamic Tension!" That's the ticket! The identical natural method that I myself developed to change my body from the scrawny, skinny-chested weakling I was at 17 to my present super-man physique! Thousands of other fellows are becoming marvelous physical specimens—my way. I give you no gadgets or contraptions to fool with. When you have learned to develop your strength through "Dynamic Tension," you can laugh at artificial muscle-makers. You simply utilize the DORMANT muscle-power in your own body—watch it increase and multiply into real, solid LIVE MUSCLE.

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Charles
Atlas

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The Magazine of Prophetic Fiction

Vol. XXIV, No. 3

August, 1943

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YOU WANT TO SEE THIS WAR WON—and won quickly. You want to see it carried to the enemy with a vengeance. Okay—so do all of us. But just remember...

A second front takes food...food to feed our allies *in addition to* our own men.

Which do you want—more meat for you, or enough meat for them? An extra cup of coffee on your breakfast table, or a full tin cup of coffee for a fighting soldier?

Just remember that the meat you don't get—and the coffee and sugar that you don't get—are up at the front lines—fighting for you. *Would you have it otherwise?*

Cheerfully co-operating with rationing is one way we can help to win this war. But there are scores of others. Many of them are described in a new free booklet called "You and the War," available from this magazine.

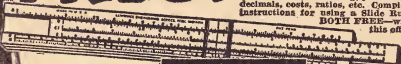
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Where the Editors, Readers and Science Fiction League Members Meet

WITH this issue we are pleased to give you Science Fiction Leaguers the results of our letter contest which closed on midnight, May 1. In response to the offer of original drawings by three of our most popular artists for the best letters on what should be done to further the progress of science-fiction, or to stimulate the functioning of SCIENCE FICTION LEAGUE chapters, a number of interesting ideas have been received.

The contest editor has been sitting up at night and scratching his receding hair line in some frenzy as he made the selection of the winners. He handed your editor the final results this morning along with his reasons for making these particular selections.

Here are the prize winners:

First Prize: (A Finlay drawing)

Arthur Louis Joquel, II,
1129 N. La Madera,
El Monte, Calif.

Second Prize: (A Marchioni drawing)

H. Loren Sinn, Jr.,
Route 1,
Carnation, Wash.

Third Prize: (A Morey drawing)

Prentis Carter,
San Bernardino, Calif.

And here are the prize-winning letters!

FIRST PRIZE

Mr. Joquel offers some sound and concrete suggestions:

A Job for Science-Fictionists

One of the most important things that readers of science-fiction can do to help advance a scientific civilization is to acquaint the general public with what is being done in the advancing of science at present.

Atomic power, controlled weather, "modernistic" cities, family airplanes—all of these are common-places to the readers of imaginative literature, and have been for many years. But the general public is just beginning to become acquainted with many of these theories—theories which may shortly become cold, accomplished fact.

Letters to the open columns of newspapers and magazines are an easy way of reaching the public mind. Requests to motion-picture theatres for films dealing with the future are another. Radio stations should also be urged to broadcast material about the developments of science to be available to the general public after the war is over.

But the best way, in the final analysis, is personal conversation with interested individuals, and their introduction to science-fiction, wherein these developments are soberly and seriously treated.

One mistake often made when trying to interest

a person in science-fiction is to simply hand him a magazine, which very often leaves them bewildered and in many cases unimpressed. This could be overcome by using individual stories excerpted from various magazines—stories which deal with the future of a particular idea in which the person is interested.

After a groundwork has been laid in this fashion, and the individual's interest has been aroused by an appeal to something he already knows, then there is virtually no limit to the wealth of material he will find in the field of science-fictional literature.

SECOND PRIZE

Mr. Sinn lands on things with both feet, which such jolt is what our contest editor thinks you Science Fiction Leaguers need:

Wipe the Slate Clean

This letter is concerned primarily with the practically defunct Science Fiction League. You have stated in recent issues of T.W.S. that you wanted all SFL members and chapters to report in as you were re-zoning the country.

Why should they report in? There is no activity in the SFL, with very little indication that there ever will be. The chances are that none of the chapters consider themselves part of the SFL anymore. Some have changed the names of their organizations while many of your former chapters have joined other national organizations.

When the SFL was first organized in the old WONDER almost a thousand science fictionists joined at once; apparently a life membership! A large number of these are no longer alive, or otherwise have quit fandom. If a member joins he should renew his membership at the end of every one or two years!

In other words, wipe the slate clean, and start over. Cancel all memberships. If the fan and/or reader is interested enough in the League he will, without doubt, renew his membership. (Don't cancel those that have joined since January 1, 1941, but all those prior to this date.)

Whatever you do, put some activity in the League and be sure and print all new membership lists.

THIRD PRIZE

Mr. Carter's letter touched the other side of the contest and opens a discussion on future science:

Magnetic Barrier

I think most science fiction fans were definitely startled when the electromicroscope was invented. Startled, not by the scientific principle involved, which was not new, but because it was a simple utilization of an old principle. The whole thing had to do with the curved path of a magnetized particle in a strong magnetic field.

When space is pioneered, and who of us doubt it?, there will be a difficulty of maintaining air

(Continued on page 10)



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Address

LOOKING FORWARD

(Continued from page 8)

around small planets. The speed of aerial molecules will exceed the velocity of escape (that is, the speed will enable the molecules to break away from the feeble gravitational pull) and an atmosphere will either have to be sealed hermetically in huge stellite-and-glass buildings, or other means established to maintain its stability.

In place of sealed glass-and-steel buildings, we should manufacture a magnetic barrier—invisible but none the less present—which will assist in holding an atmosphere to the livable planets. Around our small planet, let's say, we'll erect towers, at whose summit we place powerful magnetic instruments. After the air has bounded upward to a level with these magnetic mechanisms, they swing into a powerful atomic bombardment which ionizes the particles. That is entirely possible, remember. By removing or adding an electron, the particle will take on a definite magnetic character. It will be charged either positively or negatively.

In conjunction with this huge tower, we have also erected gigantic electro-magnets, creating a vast magnetic field through which the ionized molecules must travel.

Now since the molecules are magnetized, either negatively or positively, it follows that they will be either attracted or repelled in a magnetic field. For this reason a molecule will be urged into a CURVED PATH. Its initial velocity, coupled with the fact that it is traveling in a CURVE, will tend to bring the molecule BACK TO THE PLANETOID, describing a circle, or series of circles, rather than allowing the molecule to travel swiftly away in a practically straight line.

This same principle might be worked out on a huge spaceship. By creating a MAGNETIC BARRIER, an atmosphere could be created on the OUTSIDE of the spaceship. Weary passengers might climb out of a porthole, sans space suits, and do a lap around the ship, or otherwise stretch their weary legs.

Join the Club

Some of you will doubtless not agree wholly with what these three gentlemen have said. If not, why don't you write in and tell us about it? Anything of general interest pertaining to the SFJ or to science fiction we will gladly print in this department. And while we are on the subject, any of you readers who have not yet joined the SCIENCE FICTION LEAGUE, are cordially invited to do so. Fill out and mail in the coupon you will find at the bottom of page 125.

To join the League all you have to do is

(Continued on page 125)

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For Musical Setting

Mother, Home, Love, Sacred, Patriotic, Comic or any subject. Don't Delay—Send us your Original Poem at once—for immediate consideration and FREE Rhyming Dictionary.

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EXILE to CENTAURI

By
ROSS ROCKLYNNE

Barney Barringer, Swept into the Radiations of the Telematerio, is Broadcast to a Mysterious New World of Conflict and Romance!

CHAPTER I

Man Overboard!

WITH each heave of the yacht, Barney Barringer was sure he was going to die. As a matter of fact, the yacht was not heaving, but was calmly doing its six knots across the placid, blue-green wastes of the Caribbean.

"My heart!" he gasped at the steward. "Get me some of those green pills out of the cabinet."

The steward bowed politely, but as he turned away, allowed his lips to curl in a smirk of contempt.

He stirred the pills into a glass of lukewarm water.

"A bit stifling tonight, sir," he said. "Shall I open the port? Your father, of course, wanted you to get the full effects of the sea breeze. So strengthening, so healthful—"

Barney Barringer's six foot two shook.

"Stifling! I'm freezing. You want to kill me? For Heaven's sake, get me some more blankets. My feet are lumps of ice.

The next thing Barney knew, he was hanging head-down in space



A COMPLETE AMAZING NOVEL

There's a ringing in my ears. My head is aching itself apart."

"But—if you would allow me, sir—the night is beautiful. Perhaps a turn around the deck—rigorously adhered to. It was what your father wanted. Certainly he did not intend that you bolt yourself in a stateroom."

Barney glared. The steward hastily draped two more blankets across the tousle-haired young man who lay full length on the bed. As if following a custom instilled by rote, he held out two headache pills.

Barney paused in the middle of a glass of water, as, throbbing from the distance, came the drone of a plane. He heard the pilot circle the ship, throttle the motor, then race it. The motor chugged rackingly, was still. A voice, undistinguishable, floated across the water. The yacht's engines quieted.

"What was that?" Barney said.

"Apparently a seaplane has landed, sir. Land is not far distant."

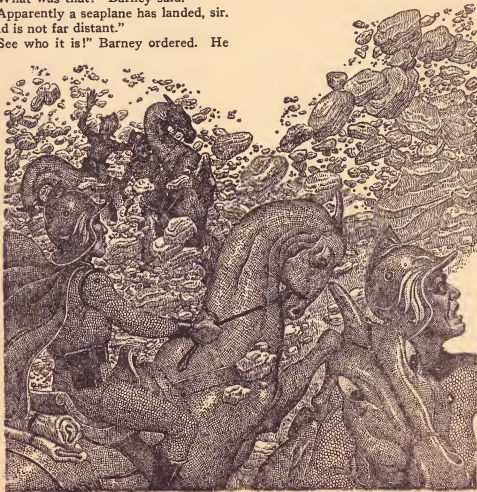
"See who it is!" Barney ordered. He

struggled to his elbows. He added darkly, "Don't think I don't know what you're getting at, steward. You're tired of waiting on me. You're actually tired of keeping me alive."

"You know what would happen if I got out of bed now? Well, I'd *die*! If you were as ill as I am—if you had a bad heart—if one of *your* lungs was gone—" as if to prove this, he coughed rackingly. "—if your legs were full of shooting pains—what's the use! You know as well as I do it's only sheer will that's keeping me together. Go on!"

The steward hastily backed out, breaking into a soft curse as he closed the door.

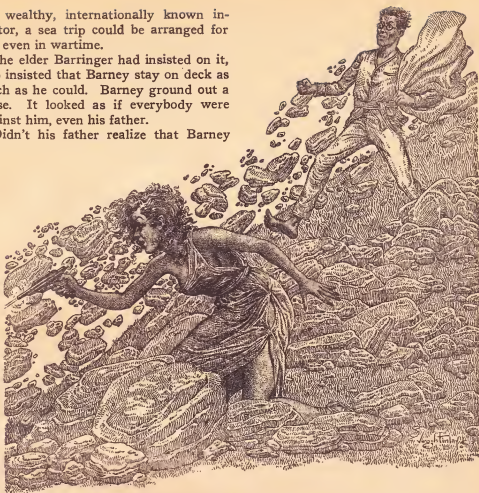
BARNEY BARRINGER sank back into the bed, fluffed his mop of black hair from his forehead and hastily pulled the covers up over him. He suppressed a moan. As the son of Grover Barringer,



the wealthy, internationally known inventor, a sea trip could be arranged for him even in wartime.

The elder Barringer had insisted on it, also insisted that Barney stay on deck as much as he could. Barney ground out a curse. It looked as if everybody were against him, even his father.

Didn't his father realize that Barney



Barney's foot slipped, and he became part of an avalanche sweeping downhill toward the battle

was practically an invalid—that he couldn't stand cold air, or violent exercise, that one touch of extreme weather would send him off just as surely as failing to take his heart medicine?

He was a physical wreck. He had told the doctors that he had pains in his heart, but they told him it was gas on the stomach, caused by lack of proper exercise. The fools had added that if he really had heart disease, the first symptoms would most likely show up as pains in the left arm.

Yet, two days later, when the pains started in his left arm, they still had not agreed with him. It was getting to be something when you had to diagnose your own ills!

And there was the tuberculosis. Barney had seen the X-ray plates. The shadows on the plates told him the awful

truth. The doctors, of course, had insisted that those shadows always showed up. Naturally, they were just trying to let him down easily—or else they didn't really know their business.

There was a knock on the door. It swung hastily open, and the steward stuck his head in.

"A gentleman to see you, sir," he said hurriedly. "Shall I—"

"Of course he will," a deep, slurred voice interrupted. The door banged all the way open, and a big man with iron-gray hair, a flat, gimlet-eyed face, shouldered his way past the steward. He shut the door in the steward's face, turned to Barney.

"Evening, Barney," he said rapidly, his small eyes taking in the blanket-swathed figure in one, all-encompassing glance. "You're looking fine. I just flew out from

land—important business. Mind if I take off my coat? I was talking with your father a couple hours ago.”

While Barney stared, Jon Freyer—such was the big man’s name—shrugged off his polo coat, draped it across a chair. Hanging around his neck by a strap, so that it had been concealed by the topcoat, was an object which looked like two cameras joined by a maze of condensers and small batteries.

Freyer took that off, too, in one energetic motion, and placed it on the bed-stand. Then he stood over Barney, hands behind his back, and started to speak.

“Your father,” he said, jerking his leonine head back in the general direction of mainland, “sent me out here to get the blueprints for his newest one. He gave them to you, didn’t he?” His eyes were piercing.

“Yes, he did,” Barney answered stupidly. He had been taken off guard. This was Jon Freyer, the lawyer through whom most of Grover Barringer’s patents had been taken out. His was a powerful figure. Little knots stood out along his jaw, which had a Teutonic cast.

He was a strange man, but Grover Barringer had trusted him implicitly with his inventions—up until the last few months. It had developed that patents, peculiarly useful as military secrets to the United States Army, had leaked across to the German High Command.

THE head of the Secret Service himself had warned Grover Barringer that Freyer was being watched. Barringer cooperated. His new invention, the telematerio, was of such value that he had given the blueprints to Barney before he started his sea cruise.

Barney, knowing their value from having had a hand in their development, had them on his person. He had helped his father with that invention considerably. Barney drew a deep breath, and made his face bland.

“Did my father give you the machine?” He indicated the double-camera device.

“And whom else would I get it from?” Freyer drew up a chair, leaned forward, transfixing Barney with his strangely

opaque eyes. “Your father sent me out, with definite instructions to pick the blueprints up from you *now*. He’s expecting the Secretary of War, personally, in less than two hours. It’s imperative. Of course, you’ve heard the latest war developments.”

Barney, with a tremendous effort of will, dragged himself from the bed, wrapping his blankets around him. He sat on the edge of the bed, shaking with cold. Why bother with suspicions when he was so beastly sick?

Of course he had the blueprints. He had them in an inner pocket of his pajamas.

“Of course, my father gave you a signed order with instructions for me to turn the blueprints over to you?” he chattered hopefully. “Those prints were a secret between dad and me. So was the machine. I didn’t think he was going to let anybody else in on it, particularly when it isn’t quite perfected. Matter of fact, I helped him considerably on it, and I was going to do some more work—”

“I expect my word is good enough,” Freyer said stiffly.

Barney’s eyes fell uneasily. He was fully aware of the potentialities of the telematerio, as it had been named, a title which aptly explained its qualities. When perfected, this machine could actually broadcast matter, molecule by molecule, and reassemble it at a given point.

Bombs, planes, tanks, whole squadrons of soldiers, could be set down in the heart of Berlin.

But still, Freyer a *spy*—that was a little bit fantastic. Barney started to reach inside his pajamas.

There was a knock on the door. Ordinarily, Barney would have allowed whoever else was present to answer. Strangely, he bounced up, ignoring the killing cold against the soles of his naked feet, and swung open the door.

The steward touched his cap.

“Radiogram from the mainland, sir.”

Barney exposed his hands long enough to take it. He closed the door. He unfolded the yellow slip, curiously aware of Freyer’s eyes boring into his back. He read the radiogram. For a moment after

he read the last fateful word, he tottered, agony lancing at his mind. Hot tears scalded his eyes. He crushed the 'gram into a tight ball.

As he stood there, his one impulse was to bury his head in his hands and bawl like a child. Then, piece by piece, the whole diabolical truth inducted itself into his thoughts. In the place of his grief came a cold, calculating rage.

He composed his face and turned slowly, blankets dragging ludicrously after him.

"Something wrong?" Freyer's eyes were gimlets.

Barney sat on the edge of the bed. He reached forward, abstractedly playing with the coordinate verniers of the telematerio. Freyer watched him, and Barney had the sensation of being trapped. He knew he was no match for Freyer physically. He knew he would never get out of this room if Freyer did not want him to.

He knew, too, that Freyer knew what was in the radiogram.

His eyes had a peculiarly pale cast when he raised them.

"My father was killed *six* hours ago in a laboratory explosion."

A muscle in Freyer's brutal jaw twitched.

His eyes grew cold.

"But the radiogram didn't say a lot of other things that I can guess at, Freyer," Barney added. "You arranged that laboratory explosion. So you saw my father two hours ago—stay where you are!"

His hand darted to the control switch of the telematerio, held there. Freyer slid to the edge of his chair, then stopped, eyes bulging at the two staring lenses of the machine.

BARNEY went on, through his teeth. "You murdered my father, Freyer. You tried to talk him into selling this invention. He wouldn't do it. You arranged the explosion. You stole the telematerio after the explosion. Then you leafed through my father's diary.

"You found out I had the blueprints. You knew it would take months to duplicate the machine without the prints. You

thought you could bamboozle them out of me. Well, I'm afraid we'll have to dis-appoint your fatherland—*spy!*"

He threw the power switch all the way over. A blue haze of fire enveloped the machine, and if all had gone well, Freyer would have been enveloped in the invisible emanations. Unfortunately, Freyer had literally thrown himself through the air, and Barney found himself in what he could well believe was a battle to the death. As Freyer banged into him, the bedstand crashed, the telematerio toppled, coming up short against the door.

A hard fist landed in Barney's face, but he knew from the first that he was done for. He couldn't fight. He was ill. He rolled from the bed, staggered to his feet, and Freyer kicked him savagely. He fell backward over the end table. Freyer followed him up, cursing, breathing heavily. Then he leaped back, gasping, shock contorting his face.

The telematerio lay against the door, its two curiously shaped lenses turned toward Barney like lambent eyes. And Barney was fading!

Conscienceless though he was, Freyer felt sickened. Barney Barringer, one blanket hanging around his pajama clad figure, was wasting away under the impact of the invisible emanations which bathed him. He grew wispy, tenuous, and was gone.

Conquering his revulsion, Freyer skirted the zone of influence, turned off the machine. Staring at it, he realized what Barney's intentions had been. Barney knew, as did Freyer, that the directive unit of the machine was haywire. Broadcast objects had never showed up where they were supposed to.

Sweat started on Freyer's forehead. He had narrowly escaped a fate which Barney had planned for him. Grover Barringer's diary had revealed that broadcast objects did materialize, but the chances against a person or object materializing on safe ground were infinite.

Freyer breathed his relief. That meant Barney was, for all practical purposes, dead!

After that, Freyer worked quickly. He

searched for the plans. Not finding them, he concluded grimly that the fatherland would have to get along without them.

From the voluminous coat, he brought out a silk, waterproof bag and a white and red painted buoy.

Seconds later, the telematerio, zippered tightly in its bag, to be held afloat by the buoy, dropped from the port of Barney's stateroom. The submarine lurking in these waters would follow instructions. It would be many months before Freyer's country could duplicate the machine, more months before they could perfect it. But after that—Freyer smiled a slow, terrible smile.

HE cast one look around the room. From a wall hook, he took a vividly colored scarf. Seconds later, the entire crew was electrified with the cry, "Man overboard!"

Boats were swung out from their davits, the yacht halted in its course, for the second time that night. Freyer, upon landing, had told his pilot that he would ask the captain to continue on his way. The plane was to stay where it was, pick Freyer up in an hour.

And Freyer, congratulating himself on his acumen, grinned tigerishly in the darkness.

In the next two hours, the sailors found nothing of Barney Barringer save his scarf, floating on the water. The captain wrung his hands. That Barney, despondent over his father's death and his own ill health, had taken his life, was an obvious fact.

Outwardly, Freyer commiserated with him, telling over and over again how Barney, upon receiving the radiogram, had dashed from the cabin, how he, Freyer, had followed, only to see Barney throw himself overboard.

Among those lining the rail was the steward.

To him, and to everybody else aboard ship, Barney had been a most horrible example of hypochondria.

"Good riddance to you and your imaginary ailments. Nobody will ever miss you," he said, as he spat over the railing.

CHAPTER II

An Avalanche and a Girl

MILLIONS of tiny, electric needles pricked at every cell of Barney Barringer's body as he tumbled backward into the effectual zone of the telematerio's radiations. He tried to scream. He saw Freyer grow hazy.

But beneath his fear, his mind was telling him the truth. The directive unit had him! Broadcast objects never showed up in the right places. And he, Barney, was being broadcast—where?

He felt freezing cold — indescribably swift motion — and his brain, its very molecules dissociated into a two-dimensional matrix, blacked out.

Then, almost in the same second, it leaped into full awareness!

He was lying face down, clawing at frozen, rubbly ground. A frigid breeze was blowing through his very bones. He was gasping. A racking cough was growing in his chest. He rolled over, impelled himself to his feet, stood frozen with his fear.

Below him a full hundred feet was the floor of a rock-littered valley. Low, ominous mountains sprawled across the horizon. A swollen, unnatural sun peered over the mountains directly into his face, a sun that was not his own. . . .

He stood there on the hillside, assimilating those facts with cold, flawless reasoning. He stood there, and it did not seem to matter that his heart must be laboring, that his legs and arms and chest were aching.

Nothing mattered, really. He was done for. He was an invalid. His heart medicine, his pills, his blankets—all were back on Earth. Back on Earth—then this was another planet?

For awhile, he seemed detached from his own body. He stood silent and motionless and contemplated his own death. He reviewed the battle in the stateroom, understood with lightning clarity the new danger which the world would face now. He remembered his father, and that seemed to be the only thing that could



Freyer raised his gun and shot six times. The bullets passed through Barney

cause him emotion. A salty tear ran into the corner of his lips.

Down on the floor of the valley, he was suddenly aware, something was taking place. He watched, with detached interest, what might have been the exciting moment of a horse-opera, with one lone rider trying to escape a half-dozen mounted pursuers, except that the animals weren't horses. If they were, then horses had three legs.

The lone rider was making a bee-line toward Barney's hill. Suddenly his mount stumbled, pitched headlong, lay motionless. Apparently it had been shot down. The rider barricaded himself behind his mount, and drew a weapon which, noiselessly, caused three of the pursuers to sag in their high saddles. The rest came on.

"You," Barney murmured, "had better take to the hills."

The fallen rider proceeded to follow this unheard advice. He ran, firing backward with his soundless weapon. His pursuers gained twenty steps for every one he took. He was climbing up the hillside, however, before they reached the foot.

Barney took a slow step down the hill, vaguely wondering what the pursued would do now. His foot slipped. He came down hard, with some surprise. A boulder detached itself from the hillside, which in turn dislodged two more. Within seconds, a landslide was plummeting downward. Barney stared dumbly, tried to get to his feet. But the very ground beneath him was unstable, and the next thing he knew he was part of another slide. Something

struck him cruelly across the head. And that seemed to be that.

WOOD smoke surged up his nostrils. He choked. His eyes opened. It took him some moments to figure out exactly where he was. Then he discovered he was lying full length on his blanket within an open-mouthed cave. Some ten feet away, a fire was crackling. A cross-legged figure was silhouetted against the flame.

Outside a night wind moaned.

Everything that had happened to him, including his normal emotions, came back with a start. Convulsively, he wrapped himself in the blanket. He moaned loudly.

This had the effect he wanted. The figure at the front of the cave rose and came toward him. It knelt beside him, and Barney found himself staring up into the face of a girl dressed in a peculiarly striking gold-braid, short-sleeved and kilted costume. She smiled, and even in the darkness the glory of that smile impressed itself with unaccustomed intoxication on Barney's somewhat atrophied senses.

"A girl!" he said stupidly.

"A-gurl? A-gurl?" The voice was puzzled. Then it laughed, and its owner held out her hand and offered him something which smelled a good deal like roast potato. Barney made a sudden grab for it, until he remembered that anything like that on his stomach would probably kill him.

"Take it away! Get me some soup, some broth, anything but that!" She stared at him with grave puzzled eyes when he shook his head violently. She offered him the potato again. He refused it again. She shrugged slim shoulders, sighed in perplexity and lay down near the fire. Soon Barney heard her soft breath. She calmly fell asleep, and no amount of coughing, groaning and moaning seemed to do any good.

Shivering, thoroughly miserable, Barney went toward the fire on hands and knees. Apparently the girl didn't realize that her charge was wasting away, that in his proper environment he was used to being waited on hand and foot. He piled more wood on the fire with freezing fin-

gers and doubled himself up near the brightening blaze. Something assailed his nostrils.

His misery and self-pity was now such that he didn't care what happened to him. In the morning, when the girl found him doubled up with pain on the threshold of death, maybe *then* she'd realize she could have saved him! He grinned vengefully. He gulped down a half dozen of the "roast potatoes." He went to sleep with a strangely comfortable sensation.

And when he awoke, he was not dead. Nor, surprisingly, did the succeeding hours of that day and of the next send him any nearer death. To begin with, he discovered that this strange, somewhat glorious creature, was not inclined to wait on him at all.

She came into the cave a few moments after his awakening, her arms full of hard-shelled fruits. She threw them into the fire. After the proper interval, she withdrew one, cracked it with a hard stone, proceeded to suck at the hot meat.

Barney groaned and gave up when she pointed to the fire with unmistakable meaning, indicating that he was to crack his own fruits.

After awhile, he was sulkily absorbed in his own breakfast.

He was fully aware that she was studying him intently. She smiled. He experienced a painful shock at the delicious, soft contours of her delicately tinted face. He smiled back half-heartedly. She clapped her hands in delight.

"Seetem Naga!" She pointed at herself.

BARNEY stared. Well, why not? He was here on another planet, and there were people here, and he might as well learn the language. His invalidism had made him good enough at that sort of thing to write and speak fourteen languages, besides being a good enough scientist to help his father in numerous projects. The girl had plainly said, "I am Naga!"

"Seetem Barney," he said.

She repeated the name excitedly, giving it an unexpected flavor. But she pointed at him insistently.

"Seete! Barney!"

"Different gender," Barney thought. Then he hunched forward, and devoted himself to the language in earnest, as the girl pointed out every possible object in sight and named it. The hours wore on. Barney forgot his cold, his bad lung, his bad heart.

The fire flickered down. The girl didn't seem inclined to put wood on the fire, so he put it on himself. When the wood wore out, the girl indicated with puzzled expression that she would *not* get the wood, that it was his place as a man to take care of that job.

Barney ground his teeth in anguish, and then held his blanket still closer around him.

"I can't!" he almost yelled at her. He pointed at himself. "Not good." He groaned and lay on his back and popped up again. "Pomo? See? I'm an invalid. I'm sick. If I walk around you'll have a dead man on your hands!"

The net result of this was that he left the cave, groaning under the blast of an icy wind, and gathered dead wood from a little cluster of scrub-trees hanging on the hillside.

She must have realized, however, that he knew nothing of this country, for it was she who departed to bring back food. The night came on again. He had discovered meantime that there was a gash in his head, probably collected during the avalanche.

It was practically well, and it seemed to him that Naga was waiting for it to heal up entirely. Twice, with soft hands, she smeared a pleasant smelling paste on the gash from a little vial she took from her thick belt.

By the time night was deepened, he had made good strides into the language. In the morning, when he awoke, he noted that the fire was out. Protesting, he got more wood. He found tinder, heaped the wood in orderly fashion. But he had no match.

The girl solved the difficulty by drawing from her belt a shiny little tube. She pressed a stud. A pale, needle-sized beam leaped out. The tinder smoked, burst into flame, and the wood caught on. Barney's eyes bulged.

THE blanket fell unheeded from his shoulders. He snatched the tube, turning it over and over, searching it frantically. Good heavens, it was a heat ray! He slid the casing off, but his strained eyes made nothing of the complex array of tiny tubes and power units. Finally he met the bewildered eyes of Naga. He thought her a barbarian, but this instrument proved that she came of a highly advanced, scientific civilization.

Barney clapped a hand to his side, felt the outline of the sheaf of blue-prints concealed beneath his pajamas. Suddenly he raised his eyes toward the sky. Somewhere out there, the planet Earth swung in its orbit, in the grip of a menace which but for his blunder it might have pulled itself out of.

How could he rectify that blunder? Could he actually get back there the same way he had come? And, moreover, could he get back there in time, before the enemy had a chance to duplicate and perfect the telematerio?

He had been transported at infinite velocity, transmitted across light waves like electricity traveling through a wire. Wherever he was now, on whatever planet of whatever solar system, with the tools of science at his disposal, he could go back, and save humanity from the inhuman men who menaced its freedom! It was a daring thought.

"Naga," he said, phrasing the unaccustomed words slowly, "tell me about your country!"

In the hours that followed, while he listened with an absorbing interest, by means of gestures, facial expressions, and sandwiched-in words, she unfolded not only the story of her country, but also that of herself. Barney had an amazing picture of an island-continent caught in the mesh of a war that was as grim and unrelenting as the one on Earth.

From the eastern ocean, the hordes of the Scourge of Pa-III had come, overrunning smaller nations, forcing them into slavery. But three nations lay between the Pa-III and their conquest of the whole continent and eventually the world.

On a mountainous front, a ruinous war was being fought by more than six million

covi—soldiers—armed with everything from artillery to light benders, light-traps and fleet rocket planes.

Naga raised a slim arm, pointed.

"My country lies beyond those mountains."

"And so we're in enemy territory," Barney said slowly. "Naga, how did you get here? Who are you? Somebody of importance or just a plain citizen?"

She smiled proudly.

"I believe I am of slight importance, Barney. I am the daughter of the Tejah of Na-Raff."

Tejah! If Barney translated that correctly, it meant king. And that would make her a princess. He stared at her in fascination.

"But how did you get here?" he stammered.

SHE shrugged bare, shapely shoulders. She told how her father had sent her into the mountains behind the City on the Cliff, the sparkling, turreted capital of Na-Raff. One day a strange battleship had landed.

There had been fighting. She had been abducted, flown over the mountains and taken before the Scourge himself. The Scourge threatened her with life-long imprisonment if she did not walk amongst her country's armies, imploring them to lay down their arms.

"To walk amongst them?" Barney demanded.

"By image-projection," she explained with difficulty. "The Pa-III have a secret process which allows men to walk by proxy in our very streets. They are unsubstantial, but they cannot be told apart from real beings. Sometimes an image can spy out our secrets for days before someone knows it for what it is. The *covi* then come and polarize it out of existence."

She went on to tell of her refusal, of her escape on a three-legged *jertiga* with the aid of enslaved citizens of the conquered city which was the Scourge's headquarters, of the pursuers she found on her trail a day later. And finally she referred to Barney's having rescued her.

Barney stared.

"I rescued *you*? I thought it was the other way around! *You* were the one on the—the *jertiga*, then!"

She nodded.

"It was the avalanche, Barney. It rolled down and engulfed my pursuers. It was very clever."

Barney gulped. Well, if she chose to think he had planned it, he wasn't going to disillusion her.

He changed the subject.

"But who knew your location in the mountains?"

"No one save my father and perhaps one other."

Barney pounced on that.

"Aha! And who was he?"

"Sarmis," she said, innocently. "The Chief Officer of the Secret Army."

"He was the one who sicked the Pa-III on you," Barney said with great positiveness.

An angry light flickered in her eyes.

"Do not say things like that. It was the image-projectors of the enemy which sought me out. Besides, Sarmis is even now looking for me, I am sure, since he is the man I am to marry."

"*Marry!*" The word puffed explosively from Barney's throat. A queer chill descended on his breast. He coughed weakly, and abruptly all his ills seemed to come back to plague him.

"Go on," he said miserably.

She looked at him strangely, then shrugged again.

"We must get back to my country," she asserted. "I have been waiting for you to take me. But sometimes you seemed unwell." She paused uncertainly.

Barney laughed grimly. Unwell—she should know the half of it! He set his jaw, and came to his feet, looking out over the miles of valley and swale which led to the mountains. Prickles of cold ran up and down his spine. His toes curled away from the dampness.

He wrapped his blanket tighter around him and stared down to find the Princess Naga's eyes full of mischievousness, for what reason he didn't know. He suspected that she thought his garb, while it might be customary in his country, was hardly dignified.

He reddened, and turned away hurriedly.

"Come on, Princess—we go now!"

CHAPTER III

Head-Down in Open Space

THE Princess Naga followed him without question as he led her along the rocky defile to the base of the hill. His blanket flapped raggedly around his shoulders in the wind. His bare feet seemed to pick out every sharp stone they could find. By the time they reached the valley floor, Barney was gasping, his chest seared with the fire of exhaustion. He flopped to a sitting position.

"I am not tired, Barney," Naga cried. "It will be all right if we go on."

Barney glared. He bounced to his feet and started off again toward the pass she pointed out.

"Okay," he snarled angrily to himself. "I'll keep it up until I drop in my tracks. Then you'll be surprised to learn you've been walking with a living dead man!"

Day wore away into night. The mountains, jagged like the vertebral scales of a giant dinosaur, loomed against the stars, apparently no nearer. Naga walked at his side, untiring, apparently unaware of his wheezing gasps. Finally as they reached the foothills, she suggested stopping, and Barney had his first real rest.

But after awhile, she suggested a fire, and he came wearily to his feet. When the fire was lit, she motioned to him. She was

holding in her hand a small weapon which had been carried in a holster on her belt.

Her evident intentions were to bag game of some kind. But in the half hour that passed, they found they would have to content themselves with pear-shaped tubers she dug out of the ground. They went back to the fire and huddled around it. The language lesson continued.

They struck the foothills the next day, and for two more days and nights worked their ways through the trackless gorges and passes of those mighty humps on the face of the planet. Barney's tender feet seemed to have acquired a kind of immunity to pain, his skin seemed to have given up hope of ever becoming warm again and he was too weary even to cough.

He trudged along, mile after heartless mile, every muscle of his body shrieking for surcease. But he had already sworn he would not let Naga outdo him, so he kept doggedly on. Yet, several times during that nightmarish trek, he experienced with some surprise that phenomenon known as second wind.

On the third night they camped on a bluff overlooking a sheltered plateau that was dimly touched by starlight. Barney shook at the idea of traversing that dangerous stretch.

Then he saw something—a flicker of light an indeterminate distance ahead. Naga followed his pointing finger. She gasped, moving closer to him. Her hand crept fearfully into his.

"It must be a camp the Pa-III erected," she whispered. "Our men do not volun-

[Turn page]

"THAT'S FOR ME FOR ENERGY"



tarily live in these mountains since the war started."

IN THE morning, Barney chose a path which he felt would skirt that lighted danger zone. But with the coming of dark again, the light showed up nearer. There seemed to be but one path it was physically possible to follow.

And an hour later, before complete darkness, they worked their way out of a gorge to see the light barely a mile ahead on the plateau. Naga said nothing, following him with blind confidence. He began to feel the suffocating sense of a responsibility he could not begin to handle.

But succeeding minutes of stealthy travel convinced him that there was no armed camp here. Ahead was a single, domed building hardly more than a story high.

On either side, rose dully glinting metal structures which trailed thick, insulated cables between them.

Barney led Naga all the way up to the short, metal fence which surrounded the building. He was careful not to touch the fence. There was a gate here, hanging ajar.

A path led to an arched doorway. Through three windows and the door the illumination flooded. Barney felt a tightening of his nerves, a strange sense of devil-may-care.

"Stay here. Wait for me," he whispered.

"Yes, Barney." Her voice was soft and meek.

Barney was vaguely astounded at his mental attitude. Three short days before, he had been tossing in a sick bed, afraid of the slightest errant breeze.

Now he was actually walking around in his bare feet, a single blanket slung over his shoulder sarape-fashion, on a strange world, in a strange, cold climate—and he didn't even have the sniffles! He grinned proudly to himself, and with an awakening cocksureness, certain that the Princess Naga must be watching him from the shadows, he walked boldly down a rough stone path toward the doorway of the mysterious building.

HIS self-confidence came at the wrong time. He did not see the shadowy figure that came sliding from the darkness to his left, did not hear the scuffle of heavily-shod feet. He crept unconcernedly on, until a harsh, low-pitched voice spoke warningly:

"*Trail!—halt! Who goes there?*"

Fright congealed in Barney's heart like stones. He gave vent to a single, anguished squawk and whirled in sheer panic. His blanket swung out from his body under the impetus of his rotation. A light burst in his eyes. A wave of smoke rolled up his nostrils.

He choked—and was aware that his blanket, seemingly, had been snatched from him. In a split second, he saw that his assailant, whoever he was, was clawing at the blanket, which had, entirely accidentally, wrapped clear around his head, cutting off sight.

Barney, a ridiculous scarecrow in pin-striped pajamas, leaped. His long arms closed around the man. He bore him to the ground, and panting shrilly, banged his head once or twice, but with great thoroughness, on the frozen ground. The man relaxed, Barney's blanket a Nemesis which had trapped him.

Barney jumped to his feet, chattering. He felt sickened. What if he had killed the man? What would they do to him?

Entirely forgetting that he was in the middle of a war-torn country, and not back on Earth, he dropped frantically to his knees. He pulled the blanket away. The man's eyes were closed. He was breathing heavily.

Barney snatched convulsively at the ugly looking weapon which still dribbled smoke from little vents in the barrel. He looked at it stupidly. And suddenly there was the sound of an opening door, and Barney was bathed in a flood of light.

His situation came back to him in full, dismaying force. He whirled. Blindly he extended the weapon, his finger fitting naturally into the trigger guard. Two men stood in the doorway of the building, apparently stunned with surprise. Barney, with a vengeful curse, let them have it.

Or, rather, those were his intentions.

He pressed the trigger, but nothing happened. Frantically, closing his eyes against the possible back-kick, his big hands squeezed. He opened his eyes to find that he was a target. Both men had their weapons out, and before Barney's unbelieving eyes, were raising them. He gave vent to a wild, despairing yell and threw himself to one side. His jaw fell slack.

ONE of the men clutched at his stomach. The other followed suit. Both tumbled slowly forward, struck the ground face down, kicked once or twice and were still.

"Barney!"

Barney turned stupidly, and the Princess Naga ran into his arms. She was sobbing. In one hand, she held a smaller copy of the weapon Barney had taken from the man at his feet. Sudden sweat grew on Barney's forehead. If Naga hadn't been back there watching — he shuddered the thought away.

She looked up at him with brimming eyes.

"I killed them," she sobbed.

"So you did," Barney said dumbly. "But what if they'd killed us instead?" That made some kind of reason to him, but he continued to hold the girl, relishing the warm contact of her soft body. Finally, she shook her head angrily, and drew away. Still sniffing, she looked at the man sprawled on the ground. She gasped, her throat choked with a horrified surprise.

"Barney! It is Sarmis! Chief Officer of the Secret Army!"

"Sarmis. *Sarmis!*" Barney said blankly. "Why—why, he's the one—"

She whirled savagely, her eyes blazing. "Do not say it!" she shot out. "If Sarmis is here, it is because he was looking for me! Quickly"—her voice was terrified—"we must help him. Oh, Barney, you may have killed him!"

She dropped with a whimpering cry beside the unconscious man, cradling his head in her lap, crooning to him softly, desperately. Words choked in Barney's throat. The fact that Sarmis was here meant only one thing to him.

Nonetheless, when Naga looked up imploringly, her eyes swimming, he picked Sarmis up. Tottering, grinding his teeth together in anger, he carried the man into the building, through an anteroom into another room whose rough-hewn walls were lined with silken-draped couches. He plopped Sarmis down vengefully. He whirled on Naga, his lips curling.

"Now see here," he began hotly. "I understand you're supposed to marry this man, that you're in love with him, but for Pete's sake—"

She drew herself up imperiously.

"If my poor Sarmis were awake, Barney, he would be the first to stuff your awful accusation down your throat. And he will defend himself well, too—this time he won't get tangled up in the strange looking rag you were carrying across your shoulder!"

Barney's jaw fell slack. A slow crimson started up from his neck, burned at his face. He opened his mouth twice to speak, to answer to the hot scorn in her eyes. He crumbled.

He turned on his heel, his eyes smarting with tears of rage and humiliation. Behind him, the Princess Naga watched him go, then dropped to her bare knees with an anguished cry and tried to waken Sarmis.

Barney stumbled through an empty storage room. He came upon a large room at the rear of the building in the ceiling of which a single tear-drop of light glowed.

He stopped in mid-step, his eyes sharpening, the shock of disillusionment partly diluted by the complicated structure of a machine built into the farther wall. It was an impressive-looking affair, consisting of power-banks, greasy generators and transformers, a large, square white screen before which was a metal chair on a pedestal.

Barney found his interest immediately captured. Momentarily he forgot Naga and Sarmis in the fascination of wondering what the contraption was for. Automatically, he traced leads with his eyes, probed mentally behind power-banks, looking for some clue to the machine's use. Gingerly, he ascended the tiny stairs

that led up to the chair, seated himself as gingerly.

Helplessly, he sat there, his eyes roving over the square of button-studded console at a level with his knees, at the finger-size switches. Tentatively, he depressed one switch. There was the dull throb of motors beneath the floor, the answering vibration of shrilling generators.

He entirely forgot Naga in the pride at that achievement. He'd guessed correctly there, so maybe—his finger hesitated between two buttons. He brushed one quite accidentally.

All hell broke loose! The blank screen lighted up with a hiss and roar. The power banks spit. Barney's stupefied mind was clutched with relentless, tearing talons. And the next thing he knew, he was hanging head down in mid-space with a blazing white sun off to his left, and directly below him a majestically clouded, spheroidal planet!

CHAPTER IV

In the Palace of the Tejah

A VACUUM—Barney Barringer was supremely aware of that catastrophic fact. Around him there was no air, for there was no air between planets. Nonetheless, he screamed, or tried to, even though knowing that that action would merely expel from his lungs what little oxygen he had. And then—he was back in the chair before the lighted screen!

Yet he had not returned!

For a sickening minute, he experienced that most awful of all possible sensations, that of being in two places at the same time. He was *here*, safe, sitting in this chair. But at the same time he was *here*, in obvious danger of freezing and suffocation, in vacuous space!

His mind tottered. He gurgled. He closed his eyes tight. That brought the only relief. All his senses told him that beneath his body was the hard metal of the chair. He was *here*! Therefore the other was the illusion. He kept his eyes

closed, his thoughts tumbling desperately, leaping obstacles with abnormal swiftness as he sought an answer he must have or go mad.

The obvious conclusion came to him, but before he could fully extricate the truth, something touched him on the arm. His eyes snapped open. Before he could again realize his incredible position thousands of miles away, his hand snapped forward, threw off the power switch. His muscles relaxed, as the screen paled. He turned to find Naga beside him.

"I heard you scream," she said breathlessly.

"You wouldn't care if I were in danger, would you?"

"But I thought something had happened—" she began. Her lips clamped tight as she noted his hostility. She said coldly, "Sarmis is awakening."

Barney clambered slowly down from the chair, followed Naga into the silken-draped room in which Sarmis lay.

Naga stooped over him, and Sarmis tossed and moaned. His eyes opened. He caught sight first of Barney, then of Naga. Barney saw every muscle in his stocky, handsome body go stiff. A cold panic leaped across his face, and his hand snapped down to his jeweled holster. Not finding a weapon there, it fell loosely to the couch.

It was a full minute before Sarmis spoke.

"So at last I find you, Naga, only to discover myself also in captivity."

Naga darted a triumphant look over her shoulder at Barney. She turned excitedly back to Sarmis.

"But you aren't captured! Barney—Barney is my very great friend, Sarmis—Barney fought with you, thinking you were a Pa-III."

Sarmis turned dark, enigmatic eyes on Barney.

"Ah, yes." His voice was measured, thoughtful. "It was most unexpected—but effective. You thought I was a Pa-III—wearing the uniform of a Na-Raff officer?"

He vaguely, languidly, indicated the bright gold star hanging by a jeweled cord from his metal-braid coat.

BARNEY vainly sought to pierce the defensive armor which had grown in Sarmis' dark eyes.

"Try to make me believe I wasn't justified in fighting with you," he said coldly. "You may not be Pa-III in nationality, but you could very easily be a traitor!"

"Barney!" Naga straightened, dangerous torchlights burning on her cheeks.

Sarmis transfixed Barney with his hard eyes.

"We could decide that question at swordpoint, but I see nothing to gain by it." He arose slowly, unfolding his length, finally standing up fully. He was some three inches shorter than Barney. His eyes roved around, came back to Naga.

"You took the station, then? Good enough." He laughed grimly, ignoring Barney. "A pretty coincidence, eh, my landing here short minutes before you arrived.

"Who is this Barney, my sweet? His garb is certainly nothing that would be seen on the streets of our City on the Cliff. Perhaps he is the traitor or spy which he so glibly supposes me to be."

Barney growled deep in his throat. He took a step forward. Naga interposed herself in front of him, grasping Sarmis' mail-clad arms.

"Oh, you are both so wrong," she wailed. "Sarmis, Barney is my very great friend. It was he who saved me from the Pa-III."

"A trick to gain your confidence?" said Sarmis smoothly, looking at Barney over Naga's mass of dark hair.

"It was no trick," she said angrily, and she launched into an account of her adventures, emphasizing Barney's harmlessness.

Sarmis nodded thoughtfully.

"Yes, of course. I am grateful that he went to so much trouble. But did he explain who he is?"

"Well, no—" She faltered helplessly.

"I didn't explain who I am," Barney said through his teeth, "and I think you'd believe me as little as I'd believe your story, Sarmis!"

Naga whirled on him.

"I know Sarmis' story without his tell-

ing me. As the Chief Officer of the Secret Army, my abduction by the Pa-III was his responsibility. He started out to look for me." She looked imploringly at Sarmis.

Sarmis' manner was that of one whose integrity has been impeached. He spoke stiffly, unwillingly.

"I see no point in explanations, but—yes, I sought the Princess Naga." He looked straight at her.

"She knows the love I bear for her. I would have given my life to bring her safely back to her father. Flying over these mountains, in danger of being engaged by an enemy craft, or discovered by the light-traps which the Pa-III have webbed the sky with, I saw the light of this station.

"I landed." He shrugged. "The rest you know. I had intended to capture this image-projection station, but—" Again he shrugged broad shoulders.

Naga's eyes shone like stars.

"Image-projection station!" she breathed. "Sarmis!" We didn't know. An image-projection station! Why, the Scourge can be beaten with his own greatest weapon now!"

A muscle in Sarmis' blocky jaw twitched.

"You didn't know," he began.

Barney thrust out his jaw.

"I knew," he snapped.

Naga clapped her tiny hands.

"Now we can go back before my father the Tejah and bring him great news of our capture of the station!"

Sarmis seemed to be appraising Barney. He spoke coolly.

"Yes, of course. We must hurry back to the Tejah. But—well, Naga, your—ah friend will have to be left behind. My ship," he gestured languidly with his left hand, "will only carry two. It is but a single-passenger in design."

NAGA nodded solemnly. She faced Barney, caught up his hand and pressed it.

"You will not be afraid to stay here?" she said hopefully. "It is imperative that we bring this good news to the Tejah before the Scourge learns in some manner

that the station has been taken."

Barney held himself rigid. His mind was in a turmoil. Every sense told him that Sarmis was implicated with the Pa-III. Yet, what proof had he, particularly when Naga was so vehement in her assertions that Sarmis could *not* be a traitor?

They were both against him. And to have Sarmis doubt him, Barney, was the last straw. His natural inclinations were to distrust Sarmis to the limit, but he realized he didn't have a leg to stand on with his suspicions.

Sarmis was even now scornful, haughty, treating him as less than dust. Naga had doubtless known Sarmis for years, certainly long enough to fall in love with him, to know his true character.

"All right," he said. "Go ahead. I'll hold the fort."

Naga impulsively leaned forward and kissed him on the lips. It was like a branding iron on Barney's soul. He trembled in an anguish of emotion.

"You are a very good friend, Barney!" Naga cried softly. "Do not be lonely. Soon my father will send a great fleet of planes, armed with weapons, and full of *covi* to take over the station. Then we shall see each other again!"

Sarmis had been waiting for her. As she turned, he led the way from the building, and she went after him with little tripping steps of her sandaled feet. Barney followed dumbly to the side of the small rocket plane which stood a hundred feet from the station on a level area. Sarmis and Naga entered.

Seconds later, the craft lit up from inside, a searchbeam growing in its nose. Propellers whirled—the rockets coughed in livid blasts of fire. The ship bored away through the night, missed a rising escarpment by scant inches, then was gone, its light dwindling.

Barney stared after it, his face pale in the brilliant light of stars thrown across the encircling heavens. He felt a leaden weight in his heart. Naga was gone—where? Back to her home, to the palace of the Tejah, of course—he knew in his heart that it could be no other way.

He was enough of a realist to suspect

that his distrust of Sarmis was nothing but his jealousy in another guise. For he was jealous—and he knew that he was painfully, hopelessly in love with Naga, though he had known her only for three short days. He raised his hand limply.

"Goodbye—my very good friend," he muttered morosely, trudged back to the image-projection station. But before he reached it, all his old agonies returned to torture him. His bones throbbed. He coughed rackingly. He made the couch-lined room in the station, sank to a couch, hugging himself.

Tears started in his eyes. He knew that walking around in his bare feet would sometime show its effect on him. How he had ever stood it this long, he didn't know. He fell into an orgy of self-pity. Blast Freyer—Freyer, comfortably back on Earth, the man who had killed his father, the best father a sick man ever had. He thought of all the billions of miles that stretched between here and the planet Earth, and his very mind shuddered.

"I'm crazy," he told himself hoarsely. "I'm a fool for even thinking I can ever get back there. I'm a silly fool! And in the meantime, my own country is due to be licked because *I* made an inconceivable blunder."

HE HUDDLED there in the cold, commiserating with himself, knowing that all his strength had been false, because it was Naga's admiration of him, and that alone, which had kept him going. For awhile he had entertained a dizzy hope that there was something in the air here which was healing all his ills at one blow.

Now he knew it was different. He was an invalid. He was a dying man. He was lying here coughing, and dying, and freezing, and there wasn't anything marvelous in the air at all. It was just common ordinary air.

It was blowing in freezing blasts through the station and it had, all during the hours while he and Naga struggled along, insidiously sucked at his vitality. He moaned in misery—until a sudden thought struck him. He was up like a

shot, his pains miraculously forgotten.

In another minute, he was seated before the image-projection machine, was vengefully throwing over the power switch.

In the next half-hour, he brought his pseudo-body down out of space, through the atmosphere to a landing. He found that by the mere exercise of will, he could move his legs and arms. Simple control buttons enabled him to move, either by walking or running or simply sweeping along.

He passed *through* trees and other solid objects. Finally, he brought his pseudo-self into the domed building, and was looking at his own pajama-clad figure hunched over the console.

He went ghastly pale as he reached a pseudo-hand forward to touch his real body. There was a peculiar convulsion in his mind. Then the machine, having completed a circuit, went dead.

He wiped sweat from his forehead, but he was not done. He reverted to his previous thoughts. They were thoughts that he couldn't deal with face to face, because he felt that he would sink through the floor in an agony of remorse. Sarmis! What if he—

He sent his projected self out again. He remembered Naga's telling him about the City on the Cliff, its location and the milk-white palace of her father, the Tejah, which rose from its center. In a moment, he was riding high and fast through the darkening night, skirting the mountains.

He saw no signs of the warfare that must be taking place. Looking at the forbidding ramparts of mountains to the east, he could guess why the Scourge had thus far made small headway into Na-Raff.

The City on the Cliff was aptly named. Even in starlight, it blazed like the inner fire of a great turquoise. Majestic viaducts spanned gorges. Every peak was crowned with a delicate spire or dome. The city was built on the rimrock, occasionally terraced upward.

Roads, blazing with light, curved like silver through the maze of edifices, some twisting down the mountainside to the floor of a lush valley, others winding over

the top to disappear.

He found the Tejah's palace without difficulty. He set his verniers for distance. He dropped one finger to a control button.

His image was conscious only of an outrageously swift motion. Then he found himself hanging a few feet above the roof of the palace of the Tejah of Na-Raff.

HE DROPPED straight down through the roof, finding himself in a dusty, unused upper room. Cautiously, he turned himself upside down, went through the floor. His head emerged from the ceiling, his long black hair hanging down like a peculiar growth.

He stayed that way, surveying the marble-floored room. It was a room of luxury, deeply tinted drapes on the walls, incense smoke rising from wall braziers. The doors were archways patterned like the Arabic if one were to judge by their contours.

On a little marble dais was a pear-shaped desk and a solid chair whose legs gleamed with precious gems, its leather-work hand-tooled with delicate traceries. Barney caught his breath. It seemed fully possible that he had directly impinged into the study room of the Tejah himself.

From one of the arched doorways, he heard muted voices which suddenly swelled upward as they approached. A group of men whose fiery raiment made Barney blink, entered the room. The foremost had heavy circles under piercing black eyes, an iron-grey beard dropping from a square blocky jaw. His steps were long, powerful, but there was a tell-tale slump to his broad shoulders which hinted at burdens hard to bear.

On his breast, various jewel-set insignia were grouped. The men who followed were similarly resplendent but in lesser degree. Barney felt a lump in his throat, a voiceless kinship with the man with the iron-grey beard. This must be Naga's father, the Tejah himself.

He guessed correctly. The Tejah mounted the dais, seated himself on the chair behind the desk. The other men, a

half-dozen of them, grouped standing around the dais. They seemed all of middle-age, the same stamp of responsibility on their faces as on that of the Tejah.

"Councillors," the Tejah spoke. His voice came from the very wells of exhaustion and despair. "Now that my daughter Naga seems hopelessly and forever lost to me, even though the Chief Officer of the Secret Army himself has been personally searching for her, my burdens seem almost impossible to bear.

"Yet I conceive my duty to my country, and to our allies, Qualo and Jinnia, to be above personal grief. The Pa-Ill hammer at our very gates. It is up to us to keep those gates closed. In order to do that, we must keep Ipsolo Pass open and clear for the passage of supplies to our embattled armies."

He paused, and in the pause, Barney digested his words. What was that about Naga? Hopelessly lost? But by this time, certainly, Sarmis should have arrived!

Fear drummed audibly in his temples as he listened.

"Ipsolo Pass," the Tejah said in a low, bitter monotone. "For a year the plains beyond it have run red with blood. Yet it is the only natural path through the Khotar Mountains which the Scourge can use to bring his own armies in.

"The whole life of three great, valiant nations has been tuned to that one all consuming necessity—to maintain the Pass. And yet, it seems that there is treachery in our very midst. Vital information leaks across to the enemy.

"Supply trains have been derailed, great supply ships intercepted in their courses. Explosions have occurred in the Pass itself. And it is almost a certainty that someone in Na-Raff has been directing the sabotage."

One of the councillors, a slim, sallow man, interrupted with a trace of sarcasm.

"Most of us," he pointed out, "have been given enough proof that it is the image-projectors of the enemy which are to blame. What we need, your majesty, and need badly, is one of those. We should then meet the Scourge on his own

terms!"

The Tejah made an exasperated motion.

"It is all very well to talk, Libbu. But the fact remains that since we have none, we shall have to fight the war without them."

"Sire," and this voice came from the ceiling, "we don't have to fight the war without them!"

And Barney Barringer's upside-down head was suddenly the focus of a half-dozen pair of widened, appalled eyes!

CHAPTER V

The Scourge of Pa-Ill

ONE thing Barney now knew. He had allied himself with the Na-Raff as surely as if he had been born on that country's soil. His own country might be hovering on the brink of destruction, the whole planet Earth's fate might rest in his hands, but events were shaping themselves so that he had no choice but to help them in every way at his disposal.

And there was a way, a bewildering complex number of ways, in fact, in which he could provide vital assistance. Quite by accident, he had been thrown billions of miles into space to land on this warring planet.

Quite by accident, he had, with Naga's help, captured an image-projecting station. And quite by accident, he now believed, he had uncovered the traitor to whom the Tejah had alluded. It was Sarmis, who had not returned with Naga as he had promised!

So now he revealed himself orally, and visually. Back in the station, his real body worked the controls which turned his pseudo-body in a half-flip which turned it head up and feet down on the cold marble floor, into the very midst of the confounded councillors.

"A projection! A spy! Call the guard! Have them bring polarizers!"

It was Libbu who spoke, and he was in full flight toward the door within short seconds after Barney spoke. The other

councillors stumbled backward in utter confusion, and only the Tejah's iron will held him rooted to where he stood. Toward him Barney turned and extended his arms pleadingly, appealing to him directly at his most vital spot.

"Sire," he cried, "I bring news of your daughter, Naga!"

A single muscle in the Tejah's clenched jaw twitched, visible evidence of the stormy emotions that name caused within him. His eyes flicked in one, all-encompassing glance over Barney's bare feet, his wrinkled, pin-striped pajamas, the jungle of red beard dirtying his face. For an incalculable second, his ebony eyes bored into Barney's, as if seeking to extract the truth bodily. Then a single command exploded from him.

"Stay!" Libbu heard that, and turned dumbfounded, expostulating volubly. The Tejah said, strong lips barely moving, "We will hear this projection's story!"

Barney leaped into the conversational breach without pause, the words tumbling out. He divulged nothing of his own origin, merely mentioning his meeting with Naga, their adventures, their meeting with Sarmis, the discovery of the image-projecting station.

"And Sarmis should have arrived back here by now, sire!" he added in a panic. "He must have! Sire, I think Sarmis is the traitor you spoke of!" and his voice rose in triumph.

FROM the councillors, watching in various degrees of emotional unease, there was a sudden ripple of laughter. And the Tejah seemed to share in this mirth, for his tired lips curved upward slightly.

"I hardly think we can suspect Sarmis of treachery," he said dryly. "The story he told you was truth. He was on the mission of searching for the princess, who was to become his wife. Sarmis is a Na-Raff to the core of his being, believe me, and though events must seem, to you, to point the finger of suspicion at him, those suspicions are quite groundless.

"But this image-projection station—councillors, it is possible that the tide of

war will now turn!" A great eagerness lighted his eyes, and seconds later, Barney had given him the station's location.

But the thought of Sarmis still burned in Barney's mind.

"You'll send rocket ships and *covi* and scientists as soon as you can, sire?" he pleaded. "If the Pa-Il somehow learn that the station has been occupied, they'll probably destroy it themselves, rather than take a chance of its falling into your hands."

The Tejah nodded grimly, and Barney took abrupt leave, swinging his pseudo-body in an arc that was hundreds of miles long, toward the Khotar Mountains! His heart was thudding with an anguished apprehension.

What if Sarmis were indeed a traitor, in spite of the amusement of the Tejah and his councillors? Well, he had time on his hands, and he might just as well investigate for himself.

Below him now, and to right and left, was a bewildering tangle of gouged, trackless mountains. The first traces of dawn were showing in the sky, and he caught sight of Ipsolo Pass.

The Pass was really a gorge, scarcely a thousand yards at its widest. Barney saw great encampments, probably hospital or recuperating stations. Now and then he saw slowly moving troops—and a triple system of monorails, along which stream-lined trains as much as a mile in length rushed toward the front.

Beyond Ipsolo Pass, he saw one phase of the war. The earth was torn, incredibly humped. Great concussions rolled upward. Arching light beams—the light-benders, Barney diagnosed—came from the shadowed distance to sweep over the tangle of men and equipment which stretched for miles in grim array.

Livid streaks of flame burst upward. He saw dozens of rocket planes engaged in what seemed a free-for-all. Here the bulk of the defending armies was gathered, maintaining the pass with untold quantities of blood.

He passed into enemy territory, recognizing burned cities. He came to the outskirts of the Pa-Il hordes, and it seemed as if the whole country were littered with

them, like locusts.

He saw the quick turning light-benders, spewing out their spying rays for the belching cannon. Farther back, the encampments began. Here he found a great, gaudily silvered barracks, and his breath tightened. Here, if anywhere, would be the Scourge.

He set his controls. His pseudo-body dropped, found itself in an anteroom. There was no one present. Moving through the walls themselves, he barely projected his eyes from a rough-hewn wall covered with gaudy tinsel paper.

This was a large room, in the far corner of which burned a rude log fire. His glance roved, came to rest on an unexpected scene. He experienced a paralyzing motion. Disappearing from sight through a farther door, in the company of two guards, was—Naga!

BARNEY BARRINGER entirely forgot himself. Her name burst from his constricted throat. She turned her head in one quick motion. Her glorious features contorted in incredulity.

"Barney!" she half screamed. "Barney! But it can't be—"

The two guards turned around in puzzlement, caught sight of Barney. And Barney was now aware that somebody else was in that room, a small, heavily built man who also turned to stare at him. Barney caught one flurried glimpse of cold, cruel black eyes, of a pointed chin, thick, moist lips.

Those eyes raked him with a glance of fire. But Barney, agonized beyond intelligent thought, had no thought for the Scourge, as such he must be, but for Naga.

Back in the lonely mountain station, his fingers went mad. His image flashed across the room, entirely missed its goal. He reset his control buttons, made another mistake. Two minutes later, by the time he had again entered the war office of the Scourge, Naga was no longer there. He flashed up and down through the barracks, like one demented.

After fifteen minutes of that, he knew that he had lost her, that she was located near there, but certainly in no place that

he could find. He burst into unaccustomed, impassioned curses, and the subject of his curses was Sarmis! Sarmis was a traitor! Now he had proof of that, but at what cost!

In another second, he set himself down in the middle of the Scourge's war office. He turned, saw the Scourge standing with his back to a log fire, his hands folded behind him, steadily surveying Barney with cold eyes. The Scourge spoke coolly.

"I was waiting for you, image. Where do you come from? From what station? Explain yourself. What means this mad cavorting around in my quarters?"

"What means it?" Barney yelled, brandishing his pseudo-fists. "You know what it means, you damned totalitarian tyrant! Abducting a helpless girl—you and that traitor Sarmis!"

Not a muscle in the Scourge's face moved, but a host of swift thoughts flickered beneath the calm mirror of his eyes. Barney's helpless rage increased. He went raging on, venting his hatred on the Scourge, making loose references to the image-projecting station, until the Scourge suddenly broke in with a steel voice.

"I begin to see." He laughed mirthlessly, standing like a carved rock, warming himself against the chill blasts that leaked through the room. "Sarmis must have been the one in the plane. I begin to see. You have given me some most useful information.

"Naturally, in that ridiculous costume, I should know you not to be a Pa-III. Who you are, I cannot begin to conjecture, nor does it matter. But from what you have told me, I gather that you and the Princess Naga and a Sarmis captured one of our image-projecting stations."

His crescent eyebrows lifted in questioning.

"You know what happened," Barney snarled. "Sarmis has already told you!"

The Scourge fondled his pointed jaw with a gloved hand. He turned and with his foot kicked at one of the flaming logs. Sparks cascaded up the chimney. He spoke thoughtfully, his back still to Barney.

"Having captured the station, you learned how to use it. This Sarmis started back with the princess, but was intercepted by one of our scout planes. Yes, yes. I see."

HE TURNED and with swift stride crossed the room. His thumb pressed a button on the edge of rough-hewn desk. In seconds, a door opened. The Scourge spoke unhurriedly:

"Have Negro establish contact with the projector stations, and establish also, beyond doubt, the identity of the men in control. Inform him that there is one station which has apparently fallen into enemy hands. Finding such station, he is immediately to send a fleet to destroy it."

The *covi* standing in the doorway saluted smartly and left. Barney stared as the Scourge turned. Little lights of triumph shone in the Scourge's eyes.

"You are a most useful image to have around," he murmured. "I knew nothing of a captured station. I know only that much of the air a hundred miles into Na-Raff is laced with spy-rays. The plane of your friend Sarmis, I now see, intercepted one of these spy-beams."

"Its contents were noted by the spy-tape, clicked off to appear before the Chief Officer of Espionage." He laughed grimly. "An unusual accident, that, of locating the valuable Princess Naga again. A scout plane was dispatched to force the plane down. Its pilot escaped—I assume he must be this Sarmis—but the princess was taken."

"Wait a minute!" Barney said hoarsely. He advanced a step nearer the Scourge. "You mean that Sarmis didn't—that I was the one who first informed you of the capture of the station—" He stopped speechlessly, his thoughts tumbling in self-revolting turmoil in his mind as he saw the answer, the truth, in the Scourge's suddenly cold, contemptuous eyes.

"That's what I mean," the Scourge said coldly. "Either you are an utter fool, or you are allied with the Pa-III and not with the Na-Raff. At any rate, your blunder, if blunder it was, enables us to snatch

from the Na-Raff the only possible chance they might have of defeating us. Now, image, what do you intend to do—stand here wasting my time, or wait until I bring my men with a polarizer?"

Beads of sweat stood on Barney's forehead back in the station. He felt like shrinking, like blowing away on the hurricane of contempt and mirth which mingled on the Scourge's face. A great soundless wail broke forth deep within him.

By doubting Sarmis, as surely only an insane man could have done, he had deliberately given to the Scourge information which would snatch away chance of an ultimate Na-Raff victory. He quivered under the merciless lash of his own stinging contempt.

The transition from that to rage was but a small step. Suddenly he was shaking with his hatred for this smoothly spoken conqueror who had ravaged a continent and now held in his power, as an additional weapon against Na-Raff, the Princess Naga.

He walked forward until his pseudo-image was scarcely an inch from that of the man of cold, tempered steel who stared at him.

"I'm going," he whispered. "You won't have to polarize me. But I'll be back again, and it won't be as an image. I'll be here in the flesh! I'll stand in front of you as I'm standing now, and I won't be helpless. I'll reach forward and choke the life out of your body!"

A half-smile grew on the Scourge's granite face. He did not flinch an inch from the melodramatically extended claws of Barney Barringer, nor pale before the almost crazy rage that showed on his face.

"You could not approach within ten miles of this camp, Fool," he said. And his smile became jeering.

"Nevertheless," Barney whispered, "I make you the promise. I'll be here again."

And back in the station, his hand slid forward and cut off the power, his image blanked out. Barney dropped his head into his arms, shaking in a torrent of self-loathing.

CHAPTER VI

The Gravitonic Matrix

BUT he knew that now he had something to do that was vitally important. After awhile, he raised his head. He sat there for long seconds, his face haggard, his pulse pounding painfully.

Naga was gone. It did not seem likely that he would ever see her again. Anguish twisted his lips. For brief moments out of a whole lifetime, he had experienced the normal emotions of a man with a woman. A worthless life, then— He looked stupidly at his hands. They were big hands, calloused, torn with his recent exertions.

He put his hands to his heart—he could find nothing but a steady beat. He coughed tentatively—was that the cough of a man with one lung gone? He looked at his face in a shiny part of the image-projector, and saw a heavy, reddish beard setting off a square but somewhat recessive jaw. He thrust his jaw out until his ears hurt. Then, feeling like a small boy making faces at himself, he wearily went at his task.

And as he worked, unlatching rows and rows of metal panels, revealing the complex innards of the machine, he forgot his own blunder, forgot that at this moment hordes of Pa-III and Na-Raff planes were sweeping toward this location. He was intent only on discovering the secret of the image-projector.

After all, what was it except a combination of television and radio, projecting three-dimensionally with visual manifestations? The one feature which should puzzle him was how the will entered into it, endowing the pseudo-body with the ability to walk or otherwise move around while the real body, operating the controls, remained motionless.

He grew more absorbed, finding the television and radio features, following up the connections unerringly. He discovered, finally, at least in theory, the principle underlying the machine's construction.

"Of course," he breathed. "The brain gives off electric currents that correspond to mental activity. You just broadcast those currents along with the three-dimensional frame. And this is the machine that can do it!"

Avidly, he went to work on the heart of the projector. He did not have much time to complete his inspection. At that moment, the first explosion sounded.

The chaotic moments that followed were barely recorded on Barney's brain. He remembered mostly that the walls around him crumbled. He was illumined in hell-fire as a power-bank exploded with little sparkles of flame. As he ran toward the door, the floor caved in under him. He came clambering out, screaming insanely.

It was then he grew aware of the awesome thunder of rocket ships overhead. As he fled the crumbling building, he fell headlong. He turned over. The sky was laced with arcs of fire as the planes swept over the station. Flame mushroomed upward in brilliant glory.

He fled madly into the night, away from the mind-splitting concussions that seemed dogging his very footsteps. He was a scarecrow with an ugly stream of blood flowing down the side of his head. Craters formed around him. He gave a despairing scream as he plunged over the lip of a crater. He struck, rolled over, and lay in a huddled, lifeless knot.

He awoke once, staring straight up into the sky, saw the remnants of the air-battle taking place. Now and then a plane halted in mid-flight, like some huge, stubby winged bird, fatally wounded, and tumbled downward to strike with voluminous concussion in some mountain gorge. At last a half dozen planes emerged from the tangle of conflict and fled with wild bursts of speed over the shadowed mountains, eventually disappearing.

The spontaneous effort of wakening but further reduced the flow of energy in Barney's blood-caked body. He slid quietly into a deeper unconsciousness.

HE AWOKE, and there was a clean, white smell in his nostrils. Beneath him were silken coverlets, and over him

light fluffy blankets which imposed no weight on his body. He opened his eyes, and he was in a tiny alcove through whose window he could see the delicate spires of the City on the Cliff.

A door opened, and a white-clad figure looked in at him. It was a woman, older than Naga, with the lines of middle-age around her eyes.

"The Tejah wishes to speak with you," she said. "Will you receive him?"

Minutes later, the Tejah of Na-Raff and another Na-Raff—Sarmis—entered and stood at the foot of Barney's couch.

The Tejah's hands played nervously together as if an iron will were decaying under impossible burdens. Sarmis stood at ease, an amused half-smile curling his lips. His fingers idly twirled the blood-red tassels of a sash depending from his waist.

Barney stared up at Sarmis. He remembered all that had gone before, and hot shame and horror pulsed through his veins. He averted his eyes.

"We found you in a bomb crater after our fleet beat the Pa-III off," Sarmis said, in his slow, precise tones. "Unfortunately, the image station was destroyed."

"We have been wondering," the Tejah went on, huskily, "ah—we have been hoping that perhaps you had some information that would be vital to our technicians." He finished on a hopeless note.

Inwardly, Barney squirmed. He would never be able to forget that it was he who had given the Scourge the information about the image-projector. How could he repair that inconceivable blunder? And for perhaps the first time, he realized the full potentialities of the telematerio plans, not only for his own embattled planet, but for Na-Raff too!

Suddenly, he clapped his hands to his side, where the blueprints should be. But his pajamas had been replaced with an abbreviated costume of some fluffy material. The plans weren't there. His heart almost stopped. He looked around in a flurry—and grabbed at the sheaf as he saw them on a pedestal next to the couch.

"Phew!" His breath erupted. "I thought they were gone!" Then he struggled to a sitting position, his eyes bril-

liant with excitement.

"Your majesty," he explained, waving the prints, "I can give you a machine that won't broadcast an image—it'll broadcast the real thing," and without preamble, he disclosed his own story in its entirety.

The Tejah was almost trembling when he finished. He fought to speak. Finally he choked a few words.

"The resources of all Na-Raff are yours!"

Barney was still weak from loss of blood, and he stayed on his couch until the next morning. When he awoke, the mountain breeze was blowing through the open window. He winced at the cold. He sniffled. A ridiculous, self-revealing thought strayed through his mind.

"Good heavens, have I got a real cold?"

Sullen anger made him sweep the thought away. Of course, he had a cold. He'd always been susceptible to colds. That was the reason one of his lungs was gone. He sullenly brooded over those obvious facts, but somehow they didn't seem to carry much weight with him, for instead of pulling the covers over him, he got up.

AND now a series of slow, heartbreaking weeks passed. He discovered that the resources of all Na-Raff were his indeed. An entire laboratory building was given over to him.

He became an executive, with half a hundred laboratory workers and scientists scampering at his orders. He discovered, however, that his command of the Na-Raff language was inadequate for his work.

Sarmis, surprisingly, in addition to being Chief Officer of the Secret Army, proved himself to be a scientist. He had made a special trip to Barney's office having been told by the Tejah, doubtless, that Barney had originally suspected him of giving Naga over to the Scourge.

Very succinctly, he told Barney his story, how Pa-III planes had converged on the ship. There had been a fight. Sarmis had recovered consciousness in time to save his ship from crashing at its full downward speed. But the Princess Naga had been taken by fleet Pa-III scouts

against whom he had been unable to fight.

Barney brushed the story aside, his face burning with crimson shame. He plunged into an awkward explanation of his difficulty, in order to change the subject. At once, Sarmis volunteered his tutorship, and scientific terms, of weight, of length, of volume, gradually became part of Barney's vocabulary. With that valuable information, he was able to go ahead and redraft his blueprints to the Na-Raff scale of measurement.

Sarmis proved friendly, and Barney found his dislike of the man fading. Sarmis was as concerned about Naga as Barney himself. He explained why the abduction of the Princess had been a tactical blow of no little importance.

"Morale," he said simply. "The Princess is beloved by every man and covi in Na-Raff. Since her abduction, there has been insubordination and a sort of despair in our armies which has grown daily.

"It has lost us many hard-won miles of territory. Our eastern and western flanks have been beaten down until now the whole war is taking place on the plains beyond Ipsolo Pass. When the Pa-Il take the pass—" He stopped.

"That is," he amended, "if they take the pass, the Scourge will most likely use the Princess as a hostage for the nearly impregnable City on the Cliff."

While technicians worked on a large size telematerio, Barney had an astronomer busy in the observatory on the mountain top. He had explained in general detail the solar system. Three weeks after Barney started work in his laboratory, this astronomer showed up with an old plate taken through the electro-telescope more than a year ago.

It showed a 3 type Sun surrounded by nine arcs of light of varying degrees. Barney grabbed at it, fastening his eyes longingly on the third arc of light from the central sun—earth!

Further questioning proved to him that he was on a planet which circled the star nearest Earth—Alpha Centauri itself!

And now that he knew without doubt the location of his own world, he worked at a back-breaking pace. He began to feel an awe of himself. Why wasn't he dead

by this time? Why hadn't his heart just upped and quit on him? Maybe—and the thought sneaked up on him shamefacedly—maybe he didn't even have a bad heart.

AS BARNEY expected, the telematerio, when completed, did not work. At least, the broadcasted object, which was supposed to land on the other side of the first floor laboratory, did not show up. Barney smiled a twisted smile, pulled the directive unit out of the machine's entrails, and tapped it.

Technicians and scientists, both, gathered around. Ohcha, a graying Na-Raff scientist who had been acting as Barney's direct subordinate, spoke hollowly.

"The trouble's in there, you think?"

"I know it is. The Heisenberg Principle of Uncertainty." He explained, grimly, "In some ways, electrons don't seem to follow the law of cause and effect. They act as if they have a mind of their own. That little fact apparently explains the failure of the directive unit to react correctly to the distance and dimension coordinate verniers."

He drew a deep breath. He was exhausted, mentally worn out. His long hours of work and study had put deep circles under his eyes. He pointed to the series of power units culminating in tubes not unlike those used in X-ray production.

"Broadcasting a solid object isn't much different from broadcasting sound. There is a 'carrier wave,' upon which is projected, like a shadow, a two dimensional pattern of a three-dimensional object. The carrier wave runs through light waves—like electricity through wires. Which gives broadcasted objects a practically infinite velocity.

"Figure it out—one hundred eighty-six thousand times one hundred eighty-six thousand miles per second. The carrier wave carries its own terminal within it, and before it leaves the telematerio has already had its direction determined, by passing it first through the directive unit, which is nothing less than an electronic matrix previously formed.

"That's the hitch. It's an electronic matrix! And there's nothing in this uni-

verse which will guarantee that one or a billion of those electrons are following not the path you or I might plan for it or them, but are pursuing their own silly, self-willed ways."

He fell into a brooding silence.

"One hope left, I guess. We'll do some experimenting with a neutronic matrix. One of positrons or protons." His jaw set. "Maybe they work in a sensible, understandable way."

But it was Sarmis who eventually solved that problem for him. One day Barney had need of the telematerio plans, but failed to find them in their accustomed place in his office. In a panic, he put a detail of men to work scouring through the building. The plans were not found.

"They must have been stolen," said Ohcha, terrified.

The very thought sent Barney into a cold sweat. If a spy, a fifth columnist, had been at work—and yet, no one who was not absolutely trusted had entered the building. No one? What about Sarmis? He had frequently made visits here, making invaluable suggestions.

Barney had made him a sort of confidante, leaning over backward in his effort to make up for past suspicions. The slow, insidious facts began to parade in Barney's mind, and the final result was that he found himself striding down thick rugged halls in the Tejah's palace toward Sarmis' quarters.

HE RAISED his hand to knock on the gold inlaid door, and paused. He heard, beyond the door, a voice thick with anger, and therefore almost indistinguishable.

"Fool! Go at once!" There was silence.

Barney's pulse drummed. What if Sarmis had been talking to an image? He knocked sharply.

Sarmis himself opened the door, stood there as if shocked at seeing Barney. He was breathing hard, his jaw muscles knotted. Then his blocky face relaxed, and he motioned Barney in. Barney took one look around luxuriously furnished quarters.

"I heard you talking with somebody.

He disappeared almighty fast," he said bluntly.

Sarmis' eyes did not fall. He spoke with a trace of hostility.

"A servant. The fool! He brings me a wine I am not fond of, with the ridiculous excuse that war conditions make unavailable my usual brand. Still—" He shrugged, poured Barney a goblet of the detested wine. His hand played carelessly with his vividly colored sash. He surveyed Barney over the top of his own goblet. "What brings you here?"

Barney held himself in with an effort. "The telematerio."

"Ah, yes! The telematerio!" Sarmis' voice became energetic. He crossed the room with long strides, picked up a sheaf of papers. "This is one of our publications, my friend. And I find a mention of a new particle, the graviton.

"Your experiments with neutronic, positronic, and protonic matrices are nearing failure I understand. Well! Have you ever thought to find out *why* those particles all seem to follow their own inclinations?"

Barney held the wine goblet in clenched fingers. Slowly his muscles relaxed, a sort of despair engulfing him. Here he was, going off half-cocked again! Sarmis was just too darned interested in trying to be helpful to be a spy! He sat down wearily, his nerves twanging painfully.

Sarmis went on, his characteristic languidness replaced by enthusiasm.

"Why should a proton be one thousand eight hundred forty-six times as heavy as an electron? Simply because there are one thousand eight hundred forty-six gravitons in a proton, and only one in an electron. Which means that an electron is really a graviton, surrounded by a field of magnetic stress—a light, fluffy field which radiates vibrations causing the electron to plunge now one way, now the other.

"You see how beautiful it is? Suppose that we can isolate gravitons, make a gravitonic matrix. Strip the magnetic field from the electron, and you may have a particle which will react to your coordinate verniers the way you want it to!"

The idea was tremendous in its possi-

bilities, and Barney dispelled the remainder of his suspicions as enthusiasm swept him. The graviton—of course—and before he knew, he was plunging deep into a discussion with Sarmis, ironing out difficulties as if they were not present.

He forgot about the loss of the plans until the moment he rose to go. Then he explained to Sarmis. And Sarmis, frowning, offered to surround the laboratory building with picked men from his own Secret Army. In high relief, Barney went back to the laboratory, and within the hour, had his giant cyclotron busy on his new project.

CHAPTER VII

Prisoners of the Scourge

IN THE night that the gravitonic matrix proved a booming success, Barney sought his couch in the small room above the laboratory where the telematerio was installed, and had small inkling of the disaster that was soon to occur.

He was conscious only of an inner content as he drifted along the borderline of sleep. The job was done! He had chased his tired workers off to their various homes. A messenger had been dispatched to present the good news to the Tejah. In the morning, the Scourge would be dealt with as he should be dealt with.

And now that he had completed his work, it was up to the Na-Raff. Naga—he dreamed of her that night, and awoke in a cold fever, trembling with his longing. Now he remembered what seemed now to be the boast of an immature mind, that he would come to deal with the Scourge in the flesh.

What could he have accomplished save his own imprisonment or death? Nor could he have rescued Naga. No, whatever his desires, there was another duty which bound him with far stronger ties. It was imperative now that he get back to Earth, and get back there soon.

His thoughts were interrupted. In the room below, he could have sworn he'd heard the creak of a loose board. He

grew stiff and tense, stilling his breath, almost stilling his heart in an effort to hear further sound. But there was nothing else.

He lay there in the utter, moonless darkness and gradually relaxed. After all, he would hear such sounds—the echo of his own subconscious fears. The building was well guarded. An intruder could scarcely have entered.

But as he tried to get back to sleep, he found that he could not dismiss a slight uneasiness. Finally, in exasperation, he arose, quietly felt his way down the stairs and into an ante-room which led into the main laboratory. He put his hand on the door-knob, slowly turned it, forced the door open.

Instantly he was wide awake. In a far corner of the room was a faint glow of light, silhouetted against the light the figure of a man! His teeth met savagely. He moved into the room on bare feet. Details of the laboratory stood out more plainly now as his eyes sharpened.

In the alcove to the right, he saw the telematerio, the faint blue haze surrounding it indicating that the power was plugged in. He knew then that whatever was happening, he had no time to call Sarmis' men outside the building. He himself must stop this now!

Then there was a step behind him. In blind panic, he tried to whirl. He was too late. Something hard and threatening was jabbed into the small of his back.

"*Trail!* Halt!" A low voice snapped.

BLOOD rushed to Barney's head. His common sense told him to obey that command, and he did, his mind racing. Whoever it was it was an accomplice of the man illumined in the blue haze of the telematerio. This other man now turned at the command.

"Bejor! What is it?"

Barney's captor made low reply.

"An intruder—don't worry, my captain. He is in hand."

"Bring him here!" At the low reply, something inside Barney crumbled. A stream of foaming curses leapt to his lips, halted there unborn and slipped back to choke in his throat. That voice! He

recognized it, and knew it well. Sarmis!

He moved forward under the insistent prodding of the heat gun, and a tiny beam was flashed on his face, held there a second and snapped off. The shadowed man standing in front of Barney chuckled lowly, venomously.

"My friend Barney," said Sarmis. In the heavy gloom, his crooked, bitter smile was scarcely visible. He added, "I wished to expose myself to you at a later date, but—well, so be it! Events move more quickly now, and it was a strain posing for your benefit."

Barney finally regained his speech.

"You treacherous rat," he whispered.

"Recriminations help but little!" Sarmis snapped. "I have no time for you or for explanations. I never did dislike you, Barney. In fact I have reason to thank you. I'm glad the gravitation matrix worked out so well—at my suggestion. Ah, well. It will save the Scourge many months of research. Hold him, Bejor, and hold him well while I put a finish to this business."

He turned. The gun jammed with unmistakable warning into Barney's back. Sarmis stepped in front of the telematerio. From his jacket, he took a sheaf of papers, placed them on a pedestal before the machine. Sarmis smiled briefly at Barney.

"Right—the plans. The Scourge waits for them."

He stepped back quickly, depressed the control button. The blue haze on the machine leaped into renewed activity—the roll of plans was gone.

Then Barney began to curse Sarmis in a low monotone, his rage working upward until Sarmis turned off the machine and spoke fiercely.

"Don't be a fool! You've been a fool this far, Barney. I've posed as your friend. Well, maybe I have been your friend, but events have forced me to turn my back on many friends.

"As you've guessed, I am in the employ of the Scourge. And it was I who betrayed the Princess Naga into the hands of the Scourge—both times. As you might have guessed if you'd thought a little, whatever the Scourge himself told

you was what I *told* him to tell you.

"I realized that you might use the image-projector to visit him—recognition as a spy at that time would have entirely ruined my plans. Therefore, he told you of my being forced down by enemy planes, of the second abduction of Princess Naga."

HE WAS talking rapidly, his dark eyes boring into Barney's.

"I never was a fool. I realized from the first that he who aligned himself with the Scourge now would eventually take a place of importance by his side. With the downfall of the three allies, Na-Raff, Jinnia, and Qualo, I was to be given governorship, with Naga as my wife.

"There would have been small difference in the status of the three nations, save that they would be part of the Scourge's new plan of world improvement. Too, I am not what carefully forged papers make me out to be. My mother was Pa-III—I feel that my duty lies with her country. What else do you want to know before I send you to the Scourge?"

"Nothing," Barney whispered. "I guess the rest. And what an utter fool I've been! That first time—at the image-projector station—I should have—" He shuddered in a torrent of self-loathing.

"Yes, you should have." Sarmis nodded his dark head emphatically. "However, I feel no triumph. It was not easy, my task. But it was *right*! And now that the vital Ipsolo Pass is utterly destroyed—"

"Destroyed!" Barney surged forward, the word bursting like a wail from his lips. Then his eyes darted to the telematerio. He whispered, "You mean—"

"I do mean that! Fortunately, you've been gullible enough to take me into your confidence. I know enough about your ingenious machine to work it. Being Chief Officer of the Secret Army—" he laughed grimly—"has helped some. Previous attempts on my part to sabotage the pass have met with little success. I was vitally interested in your completing the machine."

"The Scourge knows about the Pass—" Barney said in agony.

"He is informed. Within a week, the defending armies, cut off from their source of supplies and reinforcements—I leave it to your imagination. Bejor, bring the prisoner over here."

Slowly Barney, impelled by the gun, moved into the focal range of the telematerio. Outwardly, he seemed helplessly submissive. Inwardly—

Abruptly, he lunged to one side, with a single savage cry which exploded in Sarmis' face. The telematerio swayed. Sarmis got himself in hand almost immediately. With a low curse, he hurled himself at Barney. They grappled.

Barney fought with all the consuming rage and fear that was his. But suddenly both men were on him, panting, kicking, tearing at him. He yelled at the top of his voice, fell backward. His head struck the floor, hard.

His last coherent thought was one of ironic amusement. He had told the Scourge he would face him in the flesh. And now he would, but quite, quite involuntarily. Consciousness departed abruptly.

HE CAME to in complete darkness, but found himself in possession of his faculties. He jumped to his feet, turned a slow circle. His hands came in contact with a dank, cold wall. He essayed a few steps in either direction. Behind him, there was a wall. To either side, iron bars! Where in Heaven's name was he?

The telematerio had been set to put him down in the war office of the Scourge himself. Then what had happened? Suddenly he remembered that in the brief fight with Sarmis and his accomplice he had made an attempt to topple the machine.

Perhaps the coordinate verniers had been jarred a fraction of a degree. Perhaps, irony of ironies, he was in the Scourge's dungeon. Was he in a cell? He gave a gasp, felt his way successfully along a dark corridor, and uttered a low, relieved curse.

Then, from his left, he heard a subdued rustling. A whispered voice broke the silence gratingly.

"Who is it? Who is out there?"

An inmate of the dungeon? Barney took a chance. He felt his way toward the source of the whispered question, closed his hands around iron bars. Vainly he attempted to pierce the gloom. He spoke in an undertone.

"I got in here by mistake. Where am I? Who are you?"

"Barney!" The name was uttered in a soft squeal which petered off to a whisper. "Barney! It is I, Naga—the Princess Naga! But—but—"

"Naga!" Barney reeled, stricken with dizziness. "But it *can't* be," he panted. "Naga! The Scourge wouldn't put you down here in this cold, this darkness."

Soft hands abruptly closed around his, gripped them so hard and desperately that it hurt. But in spite of the grip, the hands were trembling, were cold. Barney felt a great upsurge of longing, of tenderness. He forgot that Naga looked upon him as no more than a "very good friend."

He reached forward convulsively, grasped her bare arms, pulled her to him. She was sobbing now. Barney kissed her lips, her wet cheeks. Finally she broke away, sniffing.

"It has been terrible," she said brokenly. "I was thinking of you so much, Barney, so much! All these weeks, I've been thinking that I shouldn't have gone away with Sarmis—and when his plane went off over the Khotar Mountains I began to suspect he was all you said he was. And to think that he—"

She broke into sobs of heartbreak and humiliation. Suddenly she stopped that. "Barney, it is all over!" she said quickly. "Yesterday, the Scourge took me from the suite of rooms where he had been keeping me under heavy guard. He told me personally that Ipsolo Pass was to be blown up today!

"If it is—if it has been—then Na-Raff is defeated, and there will never be freedom again, and I will be the queen-bride of a man I hate." She said in a small voice when Barney didn't answer, "Then it *has* been blown up! Barney—" She could not go on.

Barney told her the sum total of the events of the past weeks, concluding bit-

terly with the climactic revealment of Sarmis' undercover activities.

"I was a fool from start to finish," he said through tight lips. "You had reason to trust Sarmis and so did your father. But I should have known from the first. My mind wasn't clouded by the fact that he was born in Na-Raff. And there's another reason I should have known—" His voice trailed off. He was thinking of Jon Freyer, Sarmis all over again!

He grasped Naga's arms tighter, but little confidence.

"Now, somehow, you and I are going to escape."

He could sense her sad smile.

"No, Barney. This is the stronghold of the Scourge himself. Even if we could break out of this jail—" She finished on a hopeless note.

"Well, we'll do that much, anyway!" Barney flashed. "Is there anybody else here? How about the jailer? If I could overcome him—maybe change into his clothes."

WITH misgivings she told him she was apparently the only one in the cells. The Scourge, seeing a major offensive ahead, had taken her out of her comfortable quarters, sent her down here where she would not have to be guarded so closely. Her jailer came in twice a day, with food and other necessities.

"It may be hours before he makes another appearance," she told him.

A fighting, reckless spirit grew in Barney's breast.

"If we can get through to the Scourge in person, we may be able to sell our lives at a good price," he told Naga grimly. "Anyway, I'm banking on it. And with the Scourge dead, maybe we can manage an escape, too!"

The cold, dark hours went slowly past. To while away the time, they talked in low whispers, Barney for the first time explaining his presence on this planet. "And now it looks as if I'll never get back," he added bleakly. "Naga, by being the utterly insignificant fool I have been, I've actually *helped* the enemy, both here and on Earth."

"But you haven't," she expostulated.

Her hand slid sympathetically into his. "The telematerio is still in your laboratory. Your assistant will come in the morning with military men, the way you say my father planned."

He smiled crookedly.

"Sure, it's still in the laboratory—wrecked! Sarmis had no intention of letting the Na-Raff use it. He wanted to use it himself and did—first to send explosives to Ipsolo Pass, then to send the plans for the machine—and me—to the Scourge."

"He was in a perfect position to accomplish all that, too. Chief of the Secret Army—half of whom were probably spies of the Pa-III!" He relapsed into a bitter silence.

Naga said nothing, for there was nothing to say. He was a fool, a weak, sniveling fool who was proud of himself for overcoming ills which he didn't have in the first place. He goaded himself unmercifully with that newly discovered fact, growing hot and cold with shame as he remembered certain boorish aspects of his hypochondria.

Without warning, there was a grate of keys at the far end of the dank corridor. A trapezoid of dim light leaped into being, briefly bathed Barney.

His breath froze in his throat. Naga uttered a tiny frightened sound. Not knowing whether he had been seen or not, Barney stumbled back into the deeper darkness, heart thudding with white-hot apprehension.

The jailer halted a moment, silhouetted against the light. He was a slim, tall man with overly long arms, a lantern-jawed face. He was apparently poised in abrupt wariness. Then he came forward, his keys jingling. He was carrying a tray.

Barney shrank against the wall, eyes preternaturally wide, muscles tensed for a leap that had to be good. The man paused opposite the cell next to Naga's, his eyes turned in Barney's direction. For a full minute he stood that way.

Barney held his breath in a panic. The man was staring straight at him. Then he couldn't stand it any longer. His blood vessels seemed to be bursting. He pushed himself against the wall, made a flying leap through the air.

HIS hands grabbed the man's shoulders, in the same second constricted together to wrap around his neck. A wild, throttled squawk emanated from the man's throat. Then the tray went flying into the air, something that was scalding hot ran down Barney's chest.

He pressed his advantage, forcing the man backward to the ground while fists rocked against his face and head. The jailer's knees came up. Barney grunted in agony and in a fury bounced the man's head a half dozen times against the hard earth. Then, gasping, he doubled up in pain as his adversary relaxed in unconsciousness.

Still in agony, he staggered to his feet, took the jailer's keys from his belt. He ignored Naga's frantic, whispered questions. He tried a half-dozen keys, and it seemed like a miracle when the jail door at last opened.

Naga ran into his arms, trembling. She must have felt the blood running down Barney's cheek, for she gave a whimpering cry, her soft fingers running over the wound the jailer's fist had made.

"No time for that," Barney gasped. In the half-light, he undressed the man, quickly latched himself into the metal-brad suit. It was tight, ridiculously tight, but it was the only thing at hand. It was better than the somewhat abbreviated Na-Raff sleeping outfit he had been wearing when he landed here so unexpectedly.

Naga trailed behind him as he emerged from the dungeon corridor. There were steep earthen steps, here, a dimly lighted room at the top. He remembered the gun belt hooked into the uniform, with a savage motion ripped out the heat gun. Ha! So the Scourge had told him he'd never get within ten miles of this stronghold! He grinned savagely.

With that type of drummed-in confidence, he ascended the stairs, the Princess Naga following fearfully. In the lighted room, a single Pa-Ill covi turned at the sound of Barney's approach. Without the slightest compunction, Barney burned a hole through the man's chest. There was the smell of scorched flesh, the man sprawled—but Barney was in no mood to

remember his gentle upbringings. This was war; this was his winning day!

He gestured Naga, but she held back in sheer panic.

"You can't," she whispered. "You'll never reach the Scourge safely. You are too confident."

"Like fun I am!" And to prove he had the situation down by the shoulders, he strode forward, chest out, pulling Naga along by one hand.

In the broad corridor beyond, he found doors on either side, but no sound nor light emanated from them. At the end of the corridor, however, there was a door beneath which a thin plane of light leaked.

Barney turned the knob slowly, pushed the door ajar as slowly. He quickly stepped inward, turning a savage half-circle. But the room appeared empty. He pulled Naga into the room with him, quickly closed the door. Against the farther wall, a log fire burned briskly. Glow lamps burned in the ceiling.

He opened a closet door slowly, pulled it wide open with a sudden motion, ready and waiting for anybody who might jump out. He grinned. Empty! The room was as empty as his own head used to be!

He holstered his gun, started to turn around. He heard Naga give birth to a tiny, terrified scream. He froze in mid-motion, his stomach caving in, all his confidence draining away. Finally he forced himself to turn—and found himself facing not only the Scourge, who stood with legs forked, hands behind his back, a peculiar, amused glitter in his jet eyes, but also Sarmis!

The heat gun in Sarmis' colorfully gloved hand leveled on Barney's stomach. . . .

CHAPTER VIII

Holocaust!

"WELL," said Barney, and felt himself peculiarly helpless to utter anything else. And Sarmis smiled.

"That covers the situation, my friend."

Naga stood a few inches in front of Bar-

ney, her lovely face white and pinched. The Scourge simply stood and looked, apparently relishing the by-play of emotions that must be going on between the three.

Barney was turning colder, second by second.

"How did you come here?" he asked Sarmis casually. He knew that he now faced the greatest danger. He expected no mercy of any kind, and it was chilling to realize that his own death would probably mean the death of the freedom of his own planet.

"I came the same way you did. News of the explosion at Ipsolo reached the Tejah in shorter order than I expected. The completion of the telematerio and the destruction of the Pass seemed peculiarly coincidental to my—ah—king.

"I was in no position to be discovered with the machine, and the Tejah was that moment at the doors to the building. Anyway, my particular game was up, for I had fulfilled my function in Na-Raff.

"Too, I realized that the controls of the machine were awry, that you hadn't landed where I intended you to, therefore might cause some unlooked for damage. Of course"—and his eyes grew cold—"I left instructions for my accomplice to destroy the machine."

"They'll build another one, even without the plans!" Barney said passionately.

"Not before we do." Sarmis was grimly emphatic. He looked at the Scourge.

The Scourge withdrew the plans from an inner pocket. His granite face showed a cold calculation.

"Your death," he said precisely to Barney, "could have been arranged minutes ago. True, we have been searching the encampment these past hours. It now seems foolish that we overlooked the underground cells. But in your approach to my quarters, you moved through a light-trap—

"We could have exterminated you. However, you have been of some assistance to the Pa-III, and you can be of further assistance. I understand that Na-Raff is not your native country. Therefore you are not bound to her. I offer you two alternatives. Death for yourself and

the Princess Naga—"

Sarmis for the first time lost his aplomb. He turned a stricken, paling face to the Scourge.

"Sire," he choked. "The Princess—"

"Quiet, fool. Your promised governorship of Na-Raff remains intact. But this girl no longer means anything to you. You could never tame her into becoming your bride.

"It is your own fault for revealing your true position to her. We no longer need her now that these plans are in our possession. But we could," his attention went to Barney again, "use your assistance. The rest of the planet awaits our liberation. The telematerio needs your expert assistance. Well, your answer!"

BARNEY'S lips slowly thinned. He cast a sidewise glance at Naga. She moved closer to him, the answer in her eyes a fearless reflection of his own.

"I have no desire to follow in the footsteps of another traitor I happen to know! That's my answer—take it or leave it!"

The Scourge turned to Sarmis.

"Blast them!"

Sarmis was still writhing under Naga's contempt. He looked at the Scourge in shock.

"Blast them?" he whispered. "Kill—Naga?"

"Why not? You chose your own role—play it through!"

"I—I can't!"

"Obey!" the Scourge thundered, losing patience. He uttered a snarl, wrested the weapon from Sarmis' shaking fingers. He whirled, swinging the heat gun with him, his face a conscienceless, vicious mask. The gun came up before Barney could do little more than decide to go down fighting.

Barney's first indication that something unexpected had happened was a thunder-clap that sounded like the snap of a whip across the face of the world. His second was a solid wave of concussion which sent him toppling. His third was Naga's scream, breaking above a second explosion.

He caught one chaotic glimpse of top-

pling walls, saw Sarmis thrusting his way from a deluge of logs. The lights disappeared. The log fire was blown from its grating as if a giant had emptied his lungs down the chimney.

Barney scrambled sidewise in time to escape a section of the blasted roof. His clothing was smoking. He beat at it frantically, vainly looking for Naga. A snarling figure hurled itself against him. He grappled with the Scourge, shoved him back. The world conquerer fled, leaping a burning maze, and Barney, panting, plunged after him.

From the corner of his eye, he got some idea of the terrific event that had taken place. The walls of the crude fortress were down, the rest enflamed. Beyond the fortress, was the encampment of the Pa-III reinforcements.

Soldiers were going mad, running in all directions without purpose. Barney saw one group disappearing in a holocaust of mysteriously uprooted earth and flame.

Whatever had actually happened, he was supremely aware that it had saved a couple of lives—for the present, at least! And he had one duty left. He followed the Scourge. Somewhere around him, he heard a scream. He turned, saw Naga running in his direction. He went on, trusting her to follow. A Pa-III soldier stumbled across his path, but was so stricken with blind panic, that he brushed past without an hostile action.

Ahead of him, the Scourge tumbled headlong into a bomb crater. Barney came to the lip of the crater, saw the Scourge on his feet. For one moment their eyes met. The Scourge was bloodstreaked where a splinter had scored his face.

His clothing was fouled with grime, his arms blackened. In one arm, he held the plans, in the other his heat-gun. His lips drew back savagely. He raised the gun, his thick lips mouthing inaudible curses.

Barney was about to throw himself into the crater, when some intuition broadcast him an abrupt warning. He leaped back—was then hurled through the air by the explosion of another bomb. The Scourge was no more, and Barney, sinking into the darkness of death, was fully satisfied and contented.

BUT it was not his death. Nor could he have been unconscious long. He awoke to find Naga slapping savagely at his face. He gripped at her arms. Around them, that utterly terrifying holocaust was still raging. The encamped armies of the Scourge were in utter rout.

"We must go," Naga cried chokingly. "The plane. Barney!"

And then, somehow, he was stumbling over mangled bodies, over the debris of barracks, of idle artillery and light-benders, skirting bomb craters, and Naga was leading him along. All hell had apparently broken loose on the planes beyond Ipsolo Pass. The Sun was just rising, but it could not compete with the brilliance of fire mushrooming the horizon.

His senses returned gradually. On a low knoll ringed with smoking bomb craters, a stubby-winged rocket plane took shape. A glad cry leaped in his throat. He took the initiative, pulled on the slanting cabin door with his whole weight. The door swung open. He practically threw Naga into the interior, turned as a hoarse shout drifted down the wind.

Staggering toward the plane came Sarmis, clothing torn half from his body. He threw himself across the lip of a crater. His hands shot out, wrapped like claws around Barney's neck.

Barney choked, gagged, was borne backward in the grip of a madman who growled and screamed alternately. They rolled over the edge of a crater, struck bottom with Sarmis on top. Blackness swept across Barney's mind, but he struck upward in overwhelming fury.

By the time Barney got his breath, Sarmis had scrambled over the lip of the crater, was disappearing inside the ship—just as the rocket blasts huffed out their first livid fire. Naga was at the controls, assuming that Barney was aboard!

He gave an anguished cry, and moving more quickly than ever before in his life, reached the door, hurled himself in, was flattened to the bulkhead as the rocket plane zoomed.

He knelt there, panting, remembered Sarmis. The traitor was at the nose of the ship, about to open the door to the glassed-over cubby in which Naga sat.

Barney leaped on him from behind, wrapping one arm around his neck.

The ship lifted with growing speed. Barney tottered backward. With a whispered, curse, he hurled Sarmis away, smashing him against the wall.

"Traitor!"

Sarmis teetered in front of the still open port. Barney had but to reach forward to touch Sarmis lightly on the chest. He did.

In that last moment, Sarmis must have known what was happening. His lips opened, and he screamed. Vainly he grabbed at the side of the port. The force of the wind ripped him away. His scream dwindled and was cut off abruptly.

Barney looked at the port and turned away as he closed it behind him. Seconds later, he seated himself quietly beside Naga. The tale of Sarmis' death awoke no sorrow in her.

"It's over, Barney," she choked. "It's over!"

And it was. Below them, for miles on end, the plains beyond the Ipsolo Pass were churned, gouged, incredibly tumbled. Whole armies were on the run, only to disappear in new conflagrations. The backbone of the Scourge's mighty onslaught against a world was broken.

With the Scourge himself dead, whatever resistance might yet arise would certainly be of no unified kind. What army could stand up against mysterious bombs which appeared out of thin air?

He knew, and so did Iaga, that back in his laboratory in the City on the Cliff, the Tejah himself was directing Barney's own scientists, bringing untold quantities of explosives to be projected through air and solid mountains.

He suspected the truth. Sarmis' accomplice had been instructed to destroy the telematerio. Probably, the Tejah had come in before he had the chance. Perhaps they had wrung the truth about Sarmis from him. And with the Ipsolo Pass lost, action, immediate action, was vital.

The old king had issued the order which ended the Scourge's assaults for all time, even though he knew that Barney

and his own daughter might be caught in that holocaust. Sheer guesses, they were later proved the truth.

Naga turned the plane away from that shambles after awhile, flew over the dumbfounded, unresisted armies of Na-Raff, Qualo, and Jinnia, which had expected extinction as a result of the destruction of the pass, and thence passed over the Khotar Mountains on the way to the City on the Cliff.

They flew in silence. Naga turned to him suddenly, pain in her glorious eyes.

"Barney, what will you do now? Go back to your own planet?"

"What if I did?" he said slowly.

She dropped her eyes. Barney was astounded to see two tiny tears slip down her cheeks. His eyes widened.

"Naga, you don't mean—"

She turned brimming eyes toward him.

"Yes," she said simply. "Sarmis I had known since childhood. It was—agreed. But I remember meeting you, Barney—you were so funny. Somehow since we met, Barney, you have grown. You are very different."

"Naga," he said slowly, "you should have known how I felt about you—naturally. I couldn't help it. I love you." He captured her free hand, caressed it slowly, thoughtfully. "I'm not going back to Earth, Naga. Now or ever. At least—not in person. And I think I know how to do it!"

CHAPTER IX

Restitution!

ALMOST exactly three weeks after this, trillions upon trillions of miles distant on the planet Earth, the Chief of the United States Secret Service sat in his office, a single lamp burning on his desk, studying reports on fifth-column arrests.

He heard no sound in the quiet of the office, but for some reason, he raised his head, and found himself staring at a figure garbed in curious raiment. He clawed his way to his feet, staring over the desk lamp at the figure. He recognized it at once.

"Barney Barringer! How did you get in here? Good heavens! You're dead!" He stumbled backward. His chair fell over with a clatter. His face was contorted.

"I'm alive, Chief. Plenty alive. That's the honest truth."

The chief spoke in a strangled voice.

"You're crazy! You disappeared that night."

"That's what Jon Freyer said," Barney interrupted savagely, and without giving the other a chance to speak, plunged into his strange story.

"After the rout of the Scourge, the Naraff found a half dozen image-projecting stations, deserted by the Pa-III." He concluded, matter-of-factly. "I quadrupled the power, and with the help of a few astronomers, got my coordinates down as exactly as could be expected.

"At that, I materialized outside the Moon's orbit. A little jockeying for position brought me into your office. This isn't me, exactly, of course—just an image, riding the light-beams, which means practically an infinite velocity.

"I incorporated that particular characteristic of the telematerio into the image-projector, and—well here I am! I'm a little bit hazy and misty on the edges—I'm having trouble keeping the image together over four and a half light years—but otherwise I guess I look pretty substantial."

The other came forward, staring, but his fear was gone.

"You do," he breathed. "So that's the whole story. Blast! Barney, we have to get to work on that telematerio." Now Barney noticed the lines of strain about his eyes. The Chief told him in brief detail of the war. "We have to have it!"

Barney grinned. He pulled a complete sheaf of plans from the pockets of his pajamas.

The other made a grab, his hand passing through air.

"Not that way," Barney told him. "Send for a photographer—but you'll have to do a bit of explaining if you don't want to scare him out of a year's growth."

After that important business was out of the way, the chief studied Barney with

critical eyes.

"You've changed," he said succinctly. "You've changed plenty since the day your father had me over to his laboratory."

Barney's lips hardened at mention of his father. He hunched forward, transfixing the other with his pseudo-eyes.

"As I told you, my father was murdered by Freyer, chief. Since you haven't said otherwise, I assume he's still at large. Well, I'm going to pin that murder on him. And here's how. I came as an image for one particular reason—"

He started to talk, and as he talked, the chief's eyes began to sparkle with interest.

SCARCELY two hours later, the stage had been set. Barney set his image down in an apartment building on Pennsylvania Avenue. He melted through the walls into Freyer's suite. In the kitchen was the chief. He nodded quietly. With him were a half-dozen plain-clothes men, one of them ready with a sensitive dictaphone. The chief jerked his head toward the bedroom.

Barney went in. Here, in the partial darkness, he was substantial enough, apparently, but the halo-like haze surrounding him provided a ghost-like illumination. On the bed, a man lay full length, breathing heavily. Barney looked down at him for a full minute, pseudo-eyes glittering.

"Freyer!"

Freyer stirred slightly, and Barney repeated the name. Freyer jerked. Barney saw his eyes open, saw him come to full awareness with the rapidity given to men who walk perpetually under the shadow of suspicion. Freyer's glance passed to Barney. Shock leaped across his face. He hurled himself out of the bed, knocking over a table lamp. He gave voice to a high-pitched scream and ran.

Barney headed him off. Freyer turned pulled the trigger six times as fast as he a wall, turned and screamed, waving his arms in front of his averted face.

"Freyer," Barney said grimly. "Look at me."

Freyer raised his eyes.

"I know who you are," he screamed. Then, illogically, he stooped, pulled open a drawer in the bedstand. There was a gun in his hand. Face contorted, he pulled the trigger six times as fast as he could. The bullets passed through Barney. Freyer dropped the gun and shrank back.

"You can't kill the dead," Barney told him. "You can't kill the dead that you murdered." He advanced a step. Freyer was plastered against the wall, a carven statue of petrified terror. He blubbered.

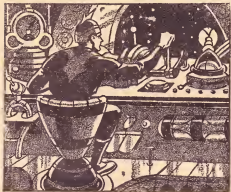
"I didn't kill you, Barney. I didn't kill you. You stumbled into the rays your-

As for the telematerio in Axis hands, it will be months before they'll learn how to perfect it.

"That graviton matrix won't be any picnic. By that time, your own machines should be messing up the enemy with bombs and men and planes. They won't have the time to perfect the machine. The war will be over too soon to give them a chance."

The other spoke thoughtfully.

"Yeah, it sure will!" He looked Barney up and down. Incomprehension flooded his square face. "Man, you sure have changed! And I guess we can't



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self. I killed your father. But I didn't kill you. You haven't any right—you're dead!" He sank to the floor, on hands and knees, burying his face in his hands, blubbering an inadvertent confession in a spasm of terror.

BARNEY looked down at him with contempt, then snapped himself back to the kitchen. His pseudo-face was drawn, haggard.

"That's enough?" and at the chief's quick nod, he added wearily, "That's all I wanted, evidence that he *did* kill my father. The rest, his fifth-column activities—I guess you can squeeze out of him.

even shake hands with you before you snap yourself back. But you'll get what's coming to you, eventually.

"We'll spread your name over every paper in the world, and these men here are my witnesses. Why—you're the world's greatest hero. I've been listening to you like a dope, and I haven't been realizing the one-man job of finishing this war you've done. By heaven, I haven't!"

He paused, thunderstruck at the enormity of that which was to happen, at the fact that he was personally facing the man responsible.

"Save it," Barney said hastily. "I guess I should stay here on Earth, Chief. A

man in my physical condition—" he smiled crookedly "—the army would snap me up, I guess. But, well, I think I'll be more useful bringing a few plans for new weapons and inventions via image."

He waved his hand in an awkward gesture of farewell.

He was gone.

Back on the planet that circled far Centauri, he pushed over the power switch, turned to face Naga.

"That takes a lot off my mind," he said simply.

She studied him with grave eyes.

"You are a great man on two worlds, now, Barney."

Very seriously he took her in his arms, and with some awe, thought of himself as he had been and as he was now. The difference was shocking, but pleasantly so. Naga seemed to think so, too, for her lips were lifted to his.



Coming in the Next Issue

DAYMARE

A Mystery Novel of the Future

By FREDRIC BROWN

I've found a blade that's just the thing
For fast, smooth shaves—no smart or sting!
These Thin Gillettes last long as well—
You save real dough, your face looks swell!



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1. WASH FACE thoroughly with hot water and soap to soften beard and eliminate accumulated grit that dulls shaving edges



2. APPLY LATHER or Brushless Shaving Cream while face is wet. If lather is used, dip your brush in water frequently



3. TWO EDGES double blade life. Marks indicated above identify edges, enabling you to give both equal use and get extra shaves



4. CLEAN BLADE in razor by loosening handle, then rinsing in hot water and shaking. Wiping the blade is likely to damage the edges



Then the man produced more pictures, horrible, terrifying, monstrous pictures

EXPEDITION

By ANTHONY BOUCHER

*The Martian Creatures Made an Art of Killing—but
They Suddenly Found Out that Art Can Boomerang!*

THE following is a transcript of the recorded two-way messages between Mars and the field expedition to the satellite of the third planet.

First Interplanetary Exploratory Expedition to Central Receiving Station:
What has the Great One achieved?

Murvin, Central Receiving Station, to

First Interplanetary Exploratory Expedition:

All right, boys. I'll play games. What has the Great One achieved? And when are we going to get a report on it?

Falzik, First Interplanetary Exploratory Expedition, to Murvin, Central Receiving Station:

Haven't you any sense of historical

moments? That was the first interplanetary message ever sent. It had to be worthy of the occasion. Trubz spent a long time working on the psychology of it while I prepared the report. Those words are going to live down through the ages of our planet.

Murvin to Falzik:

All right. Swell. You'll be just as extinct while they live on. Now how's about that report?

Report of First Interplanetary Exploratory Expedition, presented by Falzik, specialist in reporting:

The First Interplanetary Exploratory Expedition has landed successfully upon the satellite of the third planet. The personnel of this expedition consists of Karnim, specialist in astrogation; Halov, specialist in life sciences; Trubz, specialist in psychology; Lilil, specialist in the art; and Falzik, specialist in reporting.

The trip itself proved unimportant for general reporting. Special aspects of difficulties encountered and overcome will appear in the detailed individual report of Karnim after the return of the expedition. The others, in particular Trubz and Lilil, were largely unaware of these difficulties. To anyone save the specialist in astrogation, the trip seemed nowise different, except in length, from a vacation excursion to one of our own satellites.

The majority theory is apparently vindicated here on this satellite of the third planet. It does not sustain life. According to Halov, specialist in life sciences, it is not a question of can not; since life of some strange sort might conceivably exist under any conditions save those of a perfect vacuum. But so far as can be ascertained there is no life of any remotely recognizable form upon this satellite.

This globe is dead. It is so dead that one may say the word without fear. The euphemism *extinct* would be too mild for the absolute and utter deadness here. It is so dead that the thought of death is not terrifying.

Trubz is now working on the psychology of that.

Observation checks the previous calculations that one face of this satellite is always turned towards its world and one always away from it, the period of rotation coinciding exactly with the orbital period. There seems to be no difference in nature between the two sides; but obviously the far side is the proper site for the erection of our temporary dome. If the hypothetical inhabitants of the third planet have progressed to the use of astronomical instruments, we do not wish to give them warning of our approach by establishing ourselves in the full sight of those instruments.

The absence of life on this satellite naturally proved a serious disappointment to Halov, but even more so to Lilil, who felt inspired to improvise a particularly ingenious specimen of his art. Fortunately the stores of the ship had provided for such an emergency and the resultant improvisation was one of the greatest triumphs of Lilil's great career. We are now about to take our first rest after the trip, and our minds are aglow with the charm and beauty of his exquisite work.

Murvin to Falzik:

All right. Report received and very welcome. But can't you give us more color? Physical description of the satellite—minerals present—exploitation possibilities—anything like that? Some of us are more interested in those than in Trubz's psychology or even Lilil's practice of the art.

Falzik to Murvin:

What are you asking for? You know as well as I do the purpose of this expedition: to discover other intelligent forms of life. And you know the double purpose behind that purpose: to verify by comparison the psychological explanation of our race-dominant fear of death (if this were a formal dispatch I'd censor that to "extinction"), and to open up new avenues of creation in the art.

That's why the personnel of this expedition, save for the astrogator, was

chosen for its usefulness *if* we discover life. Until we do, our talents as specialists are wasted. We don't know about minerals and topography. Wait for the next expedition's report on them.

If you want color, our next report should have it. It will come from the third planet itself. We've established our temporary base here easily, and are blasting off very soon for what our scientists have always maintained is the most probable source of life in this system.

Murvin to Falzik:

All right. And if you find life, I owe you a sarbel dinner at Noku's.

Falzik to Murvin:

Sarbel for two, please! Though what we've found, the Great One only—but go on to the report.

Report of First Interplanetary Exploratory Expedition, presented by Falzik, specialist in reporting:

The site of the Expedition's landing on the third planet was chosen more or less at random. It is situated on the third in size of the five continents, not far from the shore of the largest ocean. It is approximately indicated by the coordinates — and — (*) in Kubril's chart of the planet.

In the relatively slow final period of our approach, we were able to observe that the oceans of the third planet are indeed true liquids and not merely beds of molten metal, as has been conjectured by some of our scientists. We were more elated to observe definite signs of intelligent life. We glimpsed many structures which only the most unimaginative materialist could attribute to natural accident, and the fact that these structures tend to cluster together in great numbers indicates an organized and communal civilization.

That at least was our first uplifting emotional reaction, as yet not completely verified. The place of our landing is

free from such structures, and from almost everything else. It is as purely arid a desert as the region about Krinavizhd, which in some respects it strongly resembles.

At first we saw no signs of life whatsoever, which is as we could have wished it. An exploratory expedition does not want a welcoming committee, complete with spoken speeches and seven-string sridars. There was a sparse amount of vegetation, apparently in an untended state of nature, but nothing to indicate the presence of animal life until we saw the road.

It was an exceedingly primitive and clumsy road, consisting of little more than a ribbon of space from which the vegetation had been cleared; but it was a sign, and we followed it, to be rewarded shortly by our first glimpse of moving life. This was some form of apodal being, approximately one-fifth of the length of one of us, which glided across the road and disappeared before we could make any attempt at communication.

WE CONTINUED along the road for some time, suffering severely from the unaccustomed gravity and the heavy atmosphere, but spurred on by the joyous hope of fulfilling the aim of the expedition. Liril in particular evinced an inspired elation at the hope of finding new subjects for his great compositions.

The sun, markedly closer and hotter here on the third planet, was setting when at last we made our first contact with third planet life. This being was small, about the length of the first joint of one's foreleg, covered with fur of pure white, save for the brown dust of the desert, and quadrupedal. It was frisking in a patch of shade, seeming to rejoice in the setting of the sun and the lowering of the temperature. With its forelegs it performed some elaborate and to us incomprehensible ritual with a red ball.

Halov approached it and attracted its attention by a creaking of his wing-rudiments. It evinced no fear, but instantly

* The mathematical signs indicating these coordinates are, unfortunately, typographically impossible to reproduce in this publication.—*Editor.*

rolled the red ball in his direction. Halov deftly avoided this possible weapon. (We later examined it and found it to be harmless, at least to any form of life known to us; its purpose remains a mystery. Trubz is working on the psychology of it.) He then—optimistically, but to my mind foolishly—began the fifth approach, the one developed for beings of a civilization roughly parallel to our own.

It was a complete failure. The white thing understood nothing of what Halov scratched in the ground, but persisted in trying to wrench from his digits the stick with which he scratched. Halov reluctantly retreated through the approaches down to approach one (designed for beings of the approximate mental level of the Narbian aborigines) but the creature paid no heed to them and insisted upon performing with the moving stick some ritual similar to that which it had practiced with the ball.

By this time we were all weary of these fruitless efforts, so that it came as a marked relief when Lilil announced that he had been inspired to improvise. The exquisite perfection of his art refreshed us and we continued our search with renewed vitality, though not before Halov had examined the corpse of the white creature and determined that it was indubitably similar to the mammals, though many times larger than any form of mammalian life has ever become on our planet.

Some of us thought whimsically of that favorite fantasy of the science fiction composers—the outsize mammals who will attack and destroy our race. But we had not yet seen anything.

Murvin to Falzik:

That's a fine way to end a dispatch. You've got me all agog. Has the Monster Mammal King got you in his clutches?

Falzik to Murvin:

Sorry. I didn't intend to be sensational. It is simply that we've been learning so much here through—well, yes, you can call him the Monster Mam-

mal King, though the fictionists would be disappointed in him—that it's hard to find time enough for reports. But here is more.

Report of First Interplanetary Exploratory Expedition, presented by Falzik, specialist in reporting:

The sun was almost down when we saw the first intelligent being ever beheld by one of our race outside of our planet. He (for we learned afterwards that he was male, and it would be unjust to refer to an intelligent being as *it*) was lying on the ground in the shade of a structure—a far smaller structure than those we had glimpsed in passing, and apparently in a sad state of dilapidation.

In this posture the fact was not markedly noticeable, but he is a biped. Used as we are on our own planet to many forms of life—octopods (though the Great One be thanked that those terrors are nearly wiped out) ourselves hexapods, and the pesky little mammalian tetrapods—a biped still seems to us something strange and mythical. A logical possibility, but not a likelihood. The length of body of this one is approximately that of a small member of our own race.

He held a container apparently of glass in one foreleg (there must be some other term to use of bipeds, since the front limbs are not used as legs) and was drinking from it when he spied us. He choked on his drink, looked away, then returned his gaze to us and stared for a long time. At last he blinked his eyes, groaned aloud, and hurled the glass container far away.

Halov now advanced toward him. He backed away, reached one forelimb inside the structure, and brought it out clasping a long metal rod, with a handle of some vegetable material. This he pointed at Halov, and a loud noise ensued. At the time some of us thought this was the being's speech, but now we know it came from the rod, which apparently propelled some form of metal missile against Halov.

The missile, of course, bounced harmlessly off Halov's armor (he prides him-

self on keeping in condition) and our specialist in life sciences continued to advance toward the biped, who dropped the rod and leaned back against the structure. For the first time we heard his voice, which is extraordinarily low in pitch. We have not yet fully deciphered his language, but I have, as instructed, been keeping full phonetic transcriptions of his every remark. Trubz has calculated psychologically that the meaning of this remark must be:

"Ministers of the Great One, be gracious to me!"

The phonetic transcription is as follows: *

AND THEY TALK ABOUT PINK ELEPHANTS!

He watched awestruck as Halov, undaunted by his former experience, again went directly into the fifth approach. The stick in Halov's digits traced a circle in the dirt with rays coming out of it, then pointed up at the setting sun.

The biped moved his head forward and back and spoke again. Trubz's conjecture here is:

"The great sun, the giver of life."

Phonetic transcription:

BUGS THAT DRAW PRETTY PICTURES YET!

Then Halov drew a series of concentric ellipses of dotted lines about the figure of the sun. He drew tiny circles on these orbits to indicate the first and second planets, then larger ones to indicate the third and our own. The biped was by now following the drawing with intense absorption.

Halov now pointed to the drawing of the third planet, then to the biped, and back again. The biped once more moved his head forward, apparently as a gesture of agreement. Finally Halov in like manner pointed to the fourth planet, to himself, and back again, and likewise in turn for each of us.

The biped's face was blank for a moment. Then he himself took a stick and pointed from the fourth planet to Halov, saying, according to Trubz:

"This is really true?"

Transcription:

YOU MEAN YOU'RE MARTIANS?

Halov imitated the head movement of agreement. The biped dropped his stick and gasped out sounds which Trubz is sure were the invocation of the name of a potent deity. Transcription:

ORSON WELLES!

WE HAD all meanwhile been groping with the biped's thought patterns, though no success had attended our efforts. In the first place, his projection was almost nil; his race is apparently quite unaccustomed to telepathic communication. In the second place, of course, it is next to impossible to read alien thought patterns without some fixed point of reference.

Just as we could never have deciphered the ancient writings of the Khrugs without the discovery of the Burdarno Stone which gave the same inscription in their language and in an antique form of our own, so we could not attempt to decode this biped's thought patterns until we knew what they were like on a given known subject.

We now began to perceive some of his patterns of the Solar System and for our respective worlds. Halov went on to the second stage of the fifth approach. He took a group of small rocks, isolated one, held up one digit, and drew the figure one in the dirt. The biped seemed puzzled. Then Halov added another rock to the first, held up two digits, and drew the figure two, and so on for three and four. Now the biped seemed enlightened and made his agreement gesture. He also held up one digit and drew a figure beside Halov's.

His *one* is the same as ours—a not too surprising fact. Trubz has been working on the psychology of it and has decided that the figure one is probably a simple straight line in almost any numerical system. His other figures differed markedly from ours, but his intention was clear and we could to some extent follow his patterns.

Using both forelegs, Halov went on to five, six, and seven with the biped writing down his number likewise. Then

* For the convenience of the reader, these transcriptions have been retranscribed into the conventional biped spelling.—Editor.

Halov held up all his digits and wrote a one followed by the dot which represents zero and is the essence of any mathematical intelligence. This was the crucial moment—did these bipeds know how to calculate or was their numerical system purely primitive?

The biped held up eight digits and wrote a new figure, a conjoined pair of circles. Halov, looking worried, added another rock to his group and wrote down two ones. The biped wrote a circle with a tail to it. Halov added another rock and wrote a one followed by a two. The biped wrote a one followed by a circle.

Then Halov understood. We have always used an octonary system, but our mathematicians have long realized the possibility of others: a system of two, for instance, in which 11 would mean three, a system of four (the folk speech even contains survivals of such a system) in which 11 would mean five. For 11 means simply the first power of the number which is your base, plus one. This system of the bipeds obviously employs a decimal base.

(Trubz has been working on the psychology of this. He explains it by the fact that the bipeds have five digits on each forelimb, or a total of ten, whereas we have four each, a total of eight.)

Halov now beckoned to Karnim, who as astrologer is the best mathematician among us, and asked him to take over. He studied for a moment the biped's numbers, adjusted his mind rapidly to the (for the layman) hopeless confusion of a decimal system, and went ahead with simple mathematical operations. The biped followed him not unskillfully, while the rest of us concentrated on his thought patterns and began to gather their shape and nature.

The growing darkness bothered the biped before it incommoded Karnim. He rose from his squatting position over the numerals and went into the structure, the interior of which was soon alight. He came back to the doorway and beckoned us to enter. As we did so, he spoke words which Trubz conjectures to mean:

"Enter my abode and stay in peace,

O emissaries from the fourth planet."

Phonetic transcription:

YOU'LL BE GONE IN THE MORNING
AND WILL I HAVE A HEAD!

Murvin to Falsik:

What a yarn! A planet of intelligent beings! What a future for the art! Maybe I never was sold on this expedition, but I am now. Keep the reports coming. And include as much phonetic transcription as you can—the specialists are working on what you've sent and are inclined to doubt some of Trubz' interpretations. Also tell Trubz to get to work as soon as possible on the psychological problem of extinction. If this being's a mammal, he should help.

[Several reports are omitted here, dealing chiefly with the gradually acquired skill of the expedition in reading a portion of the biped's thought patterns and in speaking a few words of his language.]

Report of First Interplanetary Exploratory Expedition, presented by Falsik, specialist in reporting:

Halov and Trubz agree that we should stay with this *man* (for such we have by now learned is the name of his race) until we have learned as much from him as we can. He has accepted us now and is almost at ease with us, though the morning after our arrival, for some peculiar reason, he seemed even more surprised to see us than when we first appeared.

We can learn much more from him, now that he is used to us, than we could from the dwellers in the large massed structures and after we are well-versed in his civilization we stand much more chance of being accepted peaceably.

We have been here now for three of the days of this planet, absorbed in our new learning. (All save Lilil, who is fretful because he has not practised his art for so long. I have occasionally seen him eying the *man* speculatively.) By using a mixture of telepathy, sign language, and speech, we can by now discuss many things, though speech comes with difficulty to one who has used it

only on formal and fixed occasions.

For instance we have learned why this *man* lives alone far from his fellows. His specialty is the making of pictures with what he calls a *camera*, a contrivance which records the effect of differing intensities of light upon a salt of silver—a far more complex method than our means of making pictures with photosensitized elduron, but one producing much the same results. He has taken pictures of us, though he seems doubtful that any other *man* will ever believe the record of his *camera*.

At present he is engaged in a series of pictures of aspects of the desert, an undertaking which he seems to regard not as a useful function but as an art of some strange sort. Trubz is working on the psychology of it and says that a reproductive and imitative art is conceivable, but Lilil is scornful of the notion.

Today he showed us many pictures of other *mans* and of their cities and structures. *Man* is a thin-skinned and almost hairless animal. This *man* of ours goes almost naked, but that is apparently because of the desert heat. Normally a *man* makes up for his absence of hair by wearing a sort of artificial fur of varying shapes known as *clothes*. To judge from the pictures shown us by the *man*, this is true only of the male of the species. The female never covers her bare skin in any way.

Examination of these pictures of females shown us by our *man* fully confirms our theory that the animal *man* is a mammal.

The display of pictures ended with an episode still not quite clear to us. Ever since our arrival, the *man* has been worrying and talking about something apparently lost—something called a *kitten*. The thought pattern was not familiar enough to gather its nature, until he showed us a picture of the small white beast which we had first met and we recognized in his mind this *kitten*-pattern. He seemed proud of the picture, which showed the beast in its ritual with the ball, but still worried, and asked us, according to Trubz, if we knew anything of its whereabouts. Transcription:

YOU WOULDN'T ANY OF YOU BIG BUGS KNOW WHAT THE DEVIL'S BECOME OF THAT KITTEN, WOULD YOU?

Thereupon Lilil arose in his full creative pride and led the *man* to the place where we had met the *kitten*. The corpse was by now withered in the desert sun, and I admit that it was difficult to gather from such a spectacle the greatness of Lilil's art, but we were not prepared for the *man's* reaction.

His face grew exceedingly red and a fluid formed in his eyes. He clenched his digits and made curious gestures with them. His words were uttered brokenly and exceedingly difficult to transcribe. Trubz has not yet conjectured their meaning, but the transcription reads:

YOU DID THAT? TO A POOR HARMLESS LITTLE KITTEN? WHY, YOU—*

His attitude has not been the same toward us since. Trubz is working on the psychology of it.

Murvin to Falzik:

Tell Trubz to work on the major psychological problem. Your backers are getting impatient.

Falzik to Murvin:

I think that last report was an aspect of it. But I'm still puzzled. See what you can make of this one.

Report of First Interplanetary Exploratory Expedition, presented by Falzik, specialist in reporting:

Tonight Halov and Trubz attempted to present the great psychological problem to the *man*. To present such a problem in our confusion of thoughts, language and gesture is not easy, but I think that to some extent they succeeded.

They stated it in its simplest form: Our race is obsessed by a terrible fear of extinction. We will each of us do anything to avoid his personal extinction. No such obsession has ever been observed among the minute mammalian pests of our planet.

Now is our terror a part of our intelli-

* The remainder of this transcription has been suppressed for this audience.—Editor.

gence? Does intelligence necessarily imply and bring with it a frantic clinging to the life that supports us? Or does this terror stem from our being what we are, rather than mammals? A mammal brings forth its young directly; the young are a direct continuation of the life of the old. But with us a half dozen specialized individuals bring forth all the young. The rest of us have no part in it; our lives are dead ends, and we dread the approach of that blank wall.

Our psychologists have battled over this question for generations. Would another—say a mammalian—form of intelligent life have such an obsession? Here we had an intelligent mammal. Could he answer us?

I give the transcription of his answer, as yet not fully deciphered:

I THINK I GET WHAT YOU MEAN. AND I THINK THE ANSWER IS A LITTLE OF BOTH. O.K., SO WE'RE INTELLIGENT MAMMALS. WE HAVE MORE FEAR OF DEATH THAN THE UNINTELLIGENT, LIKE THE POOR LITTLE KITTEN YOU BUTCHERED; BUT CERTAINLY NOT SUCH A DOMINANT OBSESSION AS I GATHER YOUR RACE HAS.

Trubz thinks that this was an ambiguous answer, which will not satisfy either party among our specialists in psychology.

We then proposed, as a sub-question, the matter of the art. Is it this same psychological manifestation that has led us to develop such an art? That magnificent and highest of arts which consists in the extinction with the greatest esthetic subtlety of all other forms of life?

Here the *man's* reactions were as confusing as they had been beside the corpse of the *kitten*. He said:

SO THAT'S WHAT HAPPENED TO SNOWPUSS? ART . . . ! ART, YOU CALL IT YET! AND YOU'VE COME HERE TO PRACTICE THAT ART ON THIS WORLD? I'LL SEE YOU FRIED CRISP ON BOTH SIDES ON HADES' HOTTEST GRIDDLE FIRST!

Trubz believes that the extremely violent emotion expressed was shock at realization of the vast new reaches of esthetic experience which lay before him.

Later when he thought he was alone,

I overheard him talking to himself. There was something so emphatically inimical in his thought-patterns that I transcribed his words though I have not yet had a chance to secure Trubz's opinion on them. He beat the clenched digits of one forelimb against the other and said:

SO THAT'S WHAT YOU'RE UP TO! WE'LL SEE ABOUT THAT. BUT HOW? HOW . . . ? GOT IT! THOSE PICTURES I TOOK FOR THE PUBLIC HEALTH CAMPAIGN . . .

I am worried. If this attitude indicated by his thought-patterns persists, we may have to bring about his extinction and proceed at once by ourselves. At least it will give Lilil a chance to compose one of his masterpieces.

Final report of the First Interplanetary Exploratory Expedition, presented by Falzik, specialist in reporting:

How I could so completely have misinterpreted the *man's* thought-patterns I do not understand. Trubz is working on the psychology of it. Far from any hatred or enmity, the *man* was even then resolving to save our lives. The First Interplanetary Exploratory Expedition owes him a debt which it can never repay.

It was after sun-up the next day that he approached us with his noble change of heart. As I describe this scene I cannot unfortunately give his direct words; I was too carried away by my own emotions to remember to transcribe. Such phrases as I attribute to him here are reconstructed from the complex of our intercourse, and were largely a matter of signs and pictures.

What he did first was to show us one of his pictures. We stared at it, and drew back horrified. For it represented a being closely allied to us, almost to be taken for one of us, meeting extinction beneath a titanic weapon wielded by what was obviously the characteristic five-digit forelimb of a *man*. And that forelimb was many, many times the size of the being resembling us.

"I've been keeping this from you," he informed us. "I'll admit I've been trying to trap you. But the truth is: I'm a

dwarf *man*. The real ones are as much bigger than me as you are bigger than the *kitten*. More, even. And their favorite pastime—only they call it a sport, not art—is killing bugs like you.”

We realized now what should have struck us before—the minute size of his structure compared with those which we had seen before. Obviously he spoke the truth—he was a dwarf specimen of his race.

Then he produced more pictures—horrible, terrifying, monstrous pictures, all showing something perturbingly like us meeting cruel extinction at the whim of a *man*.

“I’ve just been keeping you here,” he said, “until some real members of my race could come and play with you. They’d like it. But I haven’t got the heart to do it. I like you, and what you told me about your art convinces me that you don’t deserve extinction like that. So I’m giving you your chance: Clear out of here and stay away from this planet. It’s the most unsafe place in the universe for your kind. If you dread extinction, stay away from the third planet!”

His resolve to spare our lives had made him happy. His face kept twisting into that grimace which we had learned to recognize as a sign of *man’s* pleasure. But we hardly watched him or even listened to him. Our eyes kept returning with awful fascination to those morbidly terrifying pictures. Then our thoughts fused into one, and with hardly a word of farewell to our savior we sped back to the ship.

This is our last report. We are now on the temporary base established on the satellite and will return as soon as we

have recovered from the shock of our narrow escape. Lilil has achieved a new composition with a captive pergut from the ship which has somewhat solaced us.

Murvin to First Interplanetary Exploratory Expedition:

You dopes! You low mammalian idiots! It’s what comes of sending nothing but specialists on an expedition. I tried to convince them you needed a good general worker like me, but no. And look at you!

It’s obvious what happened. On our planet, mammals are minute pests and the large intelligent beings are arthropodal hexapods. All right. On the third planet things have worked out the other way round. *Bugs*, as the *man* calls our kin, are tiny insignificant things. You saw those pictures and thought the *mans* were enormous; actually they meant only that the *bugs* were minute!

That *man* tricked you unpardonably, and I like him for it. Specialists . . . ! You deserve extinction for this, and you know it. But Vardanek has another idea. Stay where you are. Develop the temporary base in any way you can. We’ll send others to help you. We’ll build up a major encampment on that side of the satellite, and in our own sweet time we can invade the third planet with enough sensible ones to counteract the boners of individual specialists.

We can do it too. We’ve got all the time we need to build up our base, even if that *man* has warned his kind—who probably wouldn’t believe him anyway. Because remember this always, and feel secure: *No being on the third planet ever knows what is happening on the other side of its satellite.*

Step Up and Meet the **MAN FROM THE STARS**

in the Amazing Complete Novelet of That Name

By ROBERT MOORE WILLIAMS

Coming Next Issue!





Orián Zatursky sprang from the port brandishing his welding torch



THE LOTOSEATERS

By BOLLING BRANHAM

Twenty Men in a Spaceship Land on a New Planet as Lovely as Paradise—But Cursed With Deadly, Unspeakable Dangers!

CHAPTER I

Clipped Wings

"Courage!" he said, and pointed towards the land,
"This mounting wave will roll us shoreward soon."

Tennyson, *The Lotos Eaters*.

ONCE she had been a beautiful ship. She was one of those clean slim creations of metal that make men laugh when it is said that science and art

are separated. She had been the product of men's dreams and men's drafting boards, and there was too much science in her to say she was a work of art, and too much art in her to say that she was born of science alone.

And there were the men who commanded her, who rode her to the stars at more than the speed of light, who breathed from her hot mechanical lungs, who spat out great projectiles from the mouths of her guns, and who would fight

AN ASTOUNDING COMPLETE NOVELET

a thousand men if one so much as hinted that she did not have a soul.

But now she was humbled. In the cold, semi-darkness of a timeless space, she drifted, a smoke-blackened derelict with great rents in the once-shiny beryllium of her hull. A fleck on the awesomely vast breast of infinity, so separated from earth and earthly things that time and space and distance were indistinguishable, so little did they matter.

There had once been a crew of proud, burly men who loved the touch of steel and the fire of battle, and the deep feeling of having all the room of the universe to move in.

There were twenty of them left. There were twenty out of two hundred who huddled in the eerie dimness of the control room, straining to get oxygen down their windpipes in the stale dirty air of an airtight room, their tongues swollen and their lips cracked and chapped from lack of water. Twenty men clustered around the only air in a hundred million miles.

Among them stood Lieutenant (J. G.) Abingdon Forsythe Miller. There was little left of Miller's pretty blue uniform. In fact it took a second look to see if there was anything left of Lieutenant Abingdon Forsythe Miller.

His face was a solid ebony from the blow-back of a breech explosion, and his left eye seemed not to know what his right eye did. At least it gave no evidence of the fact.

THERE were no clothes on him save for a pair of pants which had legs of different lengths and which appeared to have the back in front. Or maybe they were wrongside out.

He did not look particularly inspiring as a leader of men, yet by the process of elimination he was the commanding officer of all the twenty men, and the martinet in Lieutenant Miller kept telling him this was his test.

So now he was talking to the twenty.

"All we need is to get some place where we have an atmosphere and time, so that we can patch some of these holes, and piece together the motors. At the present rate, we might log one astronomical unit

every forty-eight hours by operating everything from the control room, but at that rate it would take us five hundred years to reach Earth."

As he paused, Heinrich, the pharmacist's mate, arose. "Sir, there's brandy left in the sick bay cabinet back of you," he said. "If you'd open that door, I think we could use some of that stuff now."

A growling assent ran around the room.

Lieutenant Miller straightened up, quite stiff and still, and the martinet in him began speaking.

"Navy Regulations forbid the use of alcoholic beverages aboard ship except for medicinal purposes," he answered.

Heinrich's lips pulled back quietly from his big, square teeth in a smile that had no mirth in it.

"You might say then, sir, that this would be for medicinal purposes. There ain't a one of us here that don't need to get drunk. This air ain't goin' to last forever, and I feel like bein' happy when I die."

Ensign Bayer, the only other commissioned officer left alive, got slowly to his feet behind the Lieutenant.

"You're in my section, Heinrich," he said easily. "And I've bailed you out of every shore jail from Mercury to Pluto for your drunken fighting. We've got a chance of getting out of this alive. So sit down and keep your shirt on."

Lieutenant Miller silently thanked the Ensign and began talking again. While he was telling the ring of dirty, bloody faces that they had been traversing above the ecliptic of a binary star solar system, and that they had to go a hundred million miles to reach a planet, he was not thinking of that at all. He was reciting various parts of the Navy Regulations over and over to himself, and hoping that he could remember them every time he needed one. A Navy must be run by rules, he was thinking.

And when he was not thinking of the regulations he was seeing snatches of poetry he had read written out before his mind, picturing the dark eyes of his wife, and the year-old son he had never seen, and every now and then there flashed across his imagination something such

as: $w = 2A/r^2$, or the angular velocity varies inversely as the square of the radius vector.

"Don't ever forget that," he was thinking, "and don't ever forget your regulations."

During the hours which followed Ensign Bayer's face might have been made for playing poker. The derelict was rolling over and over out in the vastness of space, and the light was alternately almost bright and almost dark as the binary suns passed by the lone control-room pane of crystolite. The light revealed no thought etched into the rock-hewn lines of the Ensign's face.

His body was as solid-appearing through the holes in his uniform as that of a stone statue, and yet it seemed to move with the long slim grace of a panther.

He listened only with one ear to the words of Lieutenant Miller for he knew the problem they were up against. During the three years of the last war, there had been only one thought in his mind that had stayed there above everything else. He must get through this war alive and go back to marry a tiny, smiling, bright-haired girl who had somehow crawled into a crevice in his soul until he felt that she was part of him. And now the war was over!

That had been the last news that had come over the ether-phone before the meteor storm had blasted through their protective screen by sheer force of numbers and persistence.

"I must get back," he thought.

He had thought that until it had been molded into his being and he felt that he would spring out and swim violently through space with the movement of his arms until he reached Earth, if there were no other way.

BUT the steel of his determination could not be read on the blank, rock-hewn features of his face.

For days the others had known there was something wrong with John Carson, Machinist's Mate, third class, twenty-two years old—something that could not be seen from the outside. When they had

hit the meteor storm, he had been a virtual prisoner, and had been on his way to the brig from the control room.

He was tall, slender, and brown-haired, and most women considered him good-looking. From the farms of Kansas he had brought a lean muscular look which led most men to leave him alone. . . . Now they would not go low enough to spit on him.

When they had reached the planet *Bal-Dang*, whose intelligent, semi-human inhabitants had decided that the mineral deposits of Earth were theirs and had proceeded to take them, leaving devastation in their wake, John Carson had watched a man die beside him and had run screaming from his battle-station in overmastering terror. No man who had seen Carson groveling and hiding his face in the depths of his bunk could ever respect him again.

He would have been given a general court-martial for leaving his post in battle when they reached Earth. The thing within him that is sometimes called the zest for life had shriveled until it could get no smaller under the withering, contemptuous, looks of men who had been his friends. How could he have known whether it was better to be a live coward or a dead hero?

And through the passing hours the brilliant blue-white sheen of the myriad stars in the black firmament played across Lieutenant Miller's patrician features as the ship rolled slowly over and over.

He was still speaking in quiet, precise terms of just what they must do with just what they had, and it seemed as though the Navy Department in Washington would have writhed and squirmed and smiled in inward ecstasy could they have seen this application of Navy routine and regulation. Here was a Navy mind, an officer who had read a handbook called "Naval Leadership" and "The Manual for Officers," and who had finished top in his class at Annapolis. One who, thusly equipped, was ready to handle any emergency that might arise.

"The war is over," he was saying, "and we will never be bothered with the inhabitants of *Bal-Dang* again, for, as you

know, this was a war to the death. There were to be no peace conferences. If we had not found that the weakness of *Bal-Dang* lay in the fact that super-sonic sound vibrations broke their hearing apparatus and punctured their brain cells, the human race would probably have been obliterated.

"Now, all that remains to us is the task of getting back to Earth."

To this Chief Machinist's Mate Orian Zatursky listened, and was sad. His hawk-faced, wrinkled features were no mask for his feelings. There had been a son on board who had worked at the atomic motors with him, and in whom he had almost instilled the quiet feeling of mastery over the Herculean power that throbbed through the ship's engines as was in his own breast. And now the son was gone—the same way that another hundred and eighty men had gone in the dark airless depths of the ship in back of him.

Then he was sad because he somehow felt it in his bones that he would never again get to see the beautiful green valley of the Don, where the mountains in the summertime were like green, soft loaves squatting on the edge of a wide, blue river. He was not young anymore, and he had wanted to spend these lingering old years sitting in the sunshine and smoking quietly, thinking of the universe as he had seen it.

As he looked around at the torn metal, the smashed instruments, the few men who were left from a magnificent ship, he felt sad.

By Jupiter, but she had been a beautiful thing! A queen. But never again would she skim like Mercury with wings on her feet along the spaceways, mistress of all she surveyed. Never again would there be the tremor of full-blooded life through her as the thunderous, tremendous power of the atoms of U-235 poured out of the tubes behind her, and she moved through galaxies like a thunderbolt of lightning.

Indeed, Chief Machinist's Mate Orian Zatursky felt sad. He wanted to smoke, but he could not because they must save their precious air.

CHAPTER II

Chorus of Demons

In the afternoon they came unto a land
In which it seemed always afternoon.
All round the coast the languid air did swoon,
Breathing like one that hath a weary dream.

IT WAS a beautiful land they beheld before them. Coasting down through the fleece of white cumulus clouds that had encircled the planet, and then breaking through into a clear, sparkling atmosphere where there was a blue ocean below them, and green, sunny forests stretching into the distance, the four days of horrible, gasping, near-suffocation had seemed like a nightmare, and now these great lungfuls of fresh pure oxygen seemed like nothing but a dream.

They had nearly died until Van Zuiderhorn, the Second Class pharmacist's mate, a quiet, dreamy-eyed lad of nineteen, had developed an apparatus for converting the carbon dioxide breath of the men back into pure oxygen. The kid had taken some of their precious water, split it by electrolysis with juice from their one remaining dynamo, and reacted it with the carbon dioxide gas with the addition of heat, for the reaction was endothermic. They could go for days without water, but not without oxygen.

While they were still several million miles away, Ensign Bayer had spotted the clouds through the twelve-inch telescope that jutted from the control room, and analyzed them as water vapor. And while they were still coming, they had decided what to name the planet—*Sanctuary*, for that could easily be changed to *Sanguinary*, if the atmosphere had no oxygen.

It was a dramatic moment when they began making the tests, and Van Zuiderhorn announced the composition of the atmosphere was essentially that of the earth's atmosphere ten thousand feet up. The only real difference was that helium was present in large proportions in place of the nitrogen, with some oxygen in the form of ozone. Zuiderhorn hazarded a guess that the latter was caused by high

frequency electrical discharges among the clouds.

And there was another dramatic moment when Lieutenant Miller stepped quietly from the side of the ship, and again succumbed to regulations.

"I hereby claim thee, *Sanctuary*, in the name of Earth," he said, impulsively. Then he whispered as an afterthought, "If there are no inhabitants who object."

For man had long since ceased to grasp land from other intelligent beings.

The twenty men who dropped slowly down onto the soft, grassy ground in which the great ship rested, looked about them, blinking their eyes in the sparkling clear sunlight, looking queerly at each other's faces, and having an immense inward surge of feeling that it was destiny that had brought them here.

Fate was on their side.

They were not religious men, but some of them began to feel that way. Each of them had voyaged through enough space to know the chances were one in ten million of finding a planet similar to Earth. Just when they needed it, too.

For where they stood was at the edge of a great grassy plain, and at their backs was a virgin forest of trees that had great bunches of luscious fruits of brilliant colors hanging on bending limbs. The forest stretched back in a far haze where rose a range of snowy mountains, the whiteness sparkling in the sunlight. At their left was a clean, pure ocean—or lake—which they soon learned held fresh water, and which was fed by clear, cool streams which gurgled out of the forest.

It was almost too good to be true, and someone overheard Heinrich, the pharmacist's mate, saying so.

The men were soon drinking and bathing in the fresh blue water, and they found a peculiar thing about it. It retained its blueness in no matter how small a quantity they separated it, seeming somehow to have the blue color as an entity. Yet it was clear, and quite transparent, and was in no other way different from regular water, even in taste.

THERE were harmless protoplasmic things like jellyfish which floated

about in the water, and then there were some slippery things that were the color of sand beneath the feet and which slithered away like lightning when touched. Like eels.

It was almost idyllic, except for the occasional mumbling of Heinrich in his beard, as he said it was too good to be true, and therefore could not be true. But no one paid him any attention.

Probably two hours had passed when Ensign Bayer, the astronomer of the group, who had taken a quick bath and eaten some of the fruit, and gone back in the ship to use the telescope, returned with an announcement.

First he called them together.

"The old ship gave her last gasp when we landed, and she won't budge till we fix her," he said. "So we might as well know something of this planet we have to stay on. If any of you have noticed, you would see that the sun has not moved any in its position in the last two hours—it is in exactly the same spot now as it was when we landed here. As you will recall, this is a binary star system, and considering all the calculations and observations I made while we were approaching, I feel that I'm safe in making these assumptions.

"First you will recall that binary stars rotate around each other at a set rate, and in regular orbits. It so happens that the two stars of this system have almost exactly the same mass and density, and probably the same light magnitudes. The fact that the sun has not moved even one-sixtieth of a degree from its position since we landed leads me to believe that this planet is in the exact center of a line drawn between the two suns where the gravitational attraction from each one is the same and is neutralized! Furthermore this planet, *Sanctuary*, rotates at exactly the same speed as the two suns travel in their orbits, so that each portion of the planet maintains itself in the same relative position to each one of the suns, and if you stood in the same spot the universe would seem motionless about you.

"There is no night on *Sanctuary*, for the other sun is lighting the other side in exactly the same way this one is light-

ing this side. The only morning, noon, and afternoon you could ever know would be if you changed your position about the face of the planet. Therefore, there is no time, and if we stayed here, it would seem forever afternoon. There is no direction, but you may locate your position in one direction by sighting the altitude of the sun. In this way you are able to tell only how far you are around the planet, not in which direction you have gone.

"And in one position, corresponding to the twilight zone on Mercury, you would be where you could see two suns. If you looked to your right you would see one rising, and if you looked to your left you would see one rising—or maybe they would both be setting. But they would both be on the horizon."

Ensign Bayer looked at the scarred, intense faces around him, drew in his breath, and chuckled a little.

"This doesn't have much bearing on our fate," he grinned, "but I just thought I'd tell you in case you got to wondering why the sun didn't go down." He yawned and stretched a little. "Now that everyone's eaten and bathed, I guess we may as well sleep. One of us better stand watch." He laid his hand on the electrode pistol at his hip. "I'll stand watch first. Is that all right with you, sir?" He turned toward Lieutenant Miller.

Lieutenant Miller straightened a little and reached out his hand for the electrode pistol.

"I'll stand watch first."

Bayer shrugged and handed it over.

And in a few moments, the peaceful green quiet was unbroken save for the heavy breathing of sprawling figures in the grass, and the quiet movements of Lieutenant Miller who sat with his back against the bole of a tree, smoking and watching.

This was Sanctuary.

It seemed to Ensign Bayer that it had been no more than seconds since he had laid his head in the soft rank grass and begun to sleep, when he felt the hand of Lieutenant Miller upon his shoulder.

had been crawling in his head, the picture of a girl who called him by name and stretched out her hand to clasp his.

"My turn, sir?"

"Yes. I do not know how long it has been, since our chronometers have been destroyed, and the sun has not moved. But I am sleepy. Here, take the pistol."

Ensign Bayer took the pistol and nodded. "Ay, ay, sir."

Lieutenant Miller relaxed slowly in the grass, sighing deeply, as Bayer strapped the pistol on.

"Bayer!" said Miller suddenly.

"Yes, sir?"

"Do you feel queer?"

"Queer, sir?"

"I don't know what it is, but there is something—there is something alien here—and I can not feel it, hear it, taste it, see it, or smell it—but there is something here that I do not understand, Bayer."

"Perhaps you are just tired and a little ill from your wounds, sir."

Lieutenant Miller lay back and stared at the sky and the white clouds above them for many long seconds. "Perhaps so, Ensign," he said slowly. "We shall start work on the ship as soon as the men awaken."

"Yes, sir."

After a time Ensign Bayer sat down.

It was almost hot where he was sitting, with his back against the bole of the tree. Occasionally he scratched himself where a droplet of perspiration stung the tender spots where he had lain against the grass.

Thank goodness, there are no insects, he was saying to himself. No mosquitoes, no flies, no gnats. But he gradually became aware of the fact that there was no wind blowing. The leaves of the trees hung utterly motionless. The water of the ocean lay listlessly blue in the hot burning sunlight. Each grass blade stood as though it were a graven image, and as he looked about him there was nothing that moved. . . . There was nothing spontaneous. It seemed a land where all things were the same. Gosh, what he wouldn't give for a soft breeze against his face.

Even a gnat would help.

WHILE asleep he had been troubled by a vague, miasmic dream that

Minutes drifted by.

Ensign Bayer had begun to nod and forever afterward he was never able to tell himself when he first heard the sound. It was not there at one second, and there it was the next. And then he was not sure he had heard it at all.

He was not sure whether it was outside of him or inside of him, whether it came from the sky, the ground, or the water, but there came to his senses a strange, thin, high, nostalgic, beautiful sound. Sometimes it seemed like the high thin wail of a hundred violins, then like the sighing of wind through a thousand palm trees, and then like it must be a million voices chanting a strange fantasy of sound at a great distance. But it was never at such amplitude that he could be sure it was there, or whether he heard it or not.

But there must be something there.

Ensign Bayer did not know what was happening to him. He could not know. But over the rock-hewn muscles of his body, through the thin white denrites that were his nerve ends, up into the tips of the hairs that grew from his skin, there was a relentless, unremitting, pounding, throbbing feeling of unrest. It brought an impulse to get up and do something, but what he must do, or where he must go to do it, or how it must be done, he could not tell.

And then it seemed as if he were deep-asleep, and yet at the same time wide-awake. A sweet languor permeated down into the marrow of his bones, and he could hear the soft, muffled beats of his own heart throbbing gently a beautiful cadence in his ears.

It was then he began to see the visions. But they did not stay with him, for suddenly there burst upon his ear-drums the sound he had been hearing—the violins, the wind, and the voices—with all the vile fury of a screaming cyclone, and he could not stand it longer.

He sprang up and ran among the men, yelling for them to wake up, imploring them to take this sound away from him, and being quite a noisy person until he tripped and fell upon his face.

He lifted his head from the ground, and the sound was gone and all was normal.

"What the blazes is the matter with him?" he heard one man ask another.

Ensign Bayer remembered he was an officer and arose to his feet, ashamed.

Until he saw what was coming down the beach.

CHAPTER III

Wall of Terror

Dark faces pale against that rosy flame,
The mild-eyed melancholy Lotos-Eaters came.

JOHN CARSON, machinist's mate, third class, and first class coward, knew that if there ever was a time to be afraid, now was it.

For as he sat up from the heavy, almost dreamless sleep, he too saw what was coming down the beach. He was probably the first after Ensign Bayer to see it.

His eyes could stare straight down the narrow, beautiful white sandy strip of the beach for perhaps half a mile, and there his sight stopped.

His heart felt as though it were going to stop too.

At the end of that half-mile of white sandy beach and clear blue water, of lush green grass and voluptuous fruits hanging unpicked upon the vine, there was the cold, unremitting, solidness of a black wall of space.

Blackness and nothingness.

It was as though a cosmic guillotine had dropped and cut the planet in twain, leaving one who stood upon the edge to stare off into the infinity of space.

But it was worse than that. Carson could not see the things of space that he had come to look upon as his friends . . . the great star clusters sprawled out like fiery jewels over the firmament by the hand of a giant, the beautiful spiral nebulae which ranged from tiny pinwheels to huge cold glittering balls of light. These things were wiped from that blackness as though they had exploded in a brief moment of glory and gone forever dead. Or as if a gigantic "Coal Sack" had been thrown carefully over them to black them out till the end of time.

This was blackness as coward John Carson had never known. This was something of which the mind of man was never built to conceive.

From the vault of the heavens as far as the eye could reach down, down, to the nadir of space, a great blank wall of blackness stretched.

It had little effect on the light around the men, for the sun was on their side of the wall, and as the sun's rays struck the blackness, it was as if those rays were utterly absorbed.

And the wall was moving towards them.

It was moving so fast that Carson could see it crawling up the sand, devouring as though it were some great demon the infinitesimal bits of fruit trees, the beautiful blue water, eating, dissolving, disintegrating the world beneath his feet.

It was coming toward him, and soon it would be devouring Carson, his body would be mangled between the jaws of God knew not what, his soul banished to infinitely horrible and fiery hells.

The only way to get away from it was to run, to claw through the air, to move—to get away from there before he died.

And so, John Carson, coward, Kansas farm boy, and machinist's mate third class, began again to scream, and to run in mad, wild terror down the beach as though the forty demons were after him.

As indeed, they might have been for all he knew.

To Lieutenant Abingdon Forsythe Miller, he of the bad right eye, the unmatched pants, and the flair for oratory, this whole business did not make sense.

In the first place, the Navy had forgotten to mention such a situation as this. Therefore it was practically heresy that it should be happening. Under the heading of "Emergencies"—fire, collision, battle stations, mutiny—all things that were supposed to happen in times of peace or war were listed in a little handbook called "Emergency Drills and Navy Procedures," and Lieutenant Miller was quite positive that there was nothing could be found anywhere between its leather covers which told about "Black

Wall of Disintegration Coming Down the Beach."

No, indeed!

Now there were men about him, who, having recovered from their first astonishment, were beginning to shout.

"Quiet!" shouted Lieutenant Miller. "Everyone quiet! Don't move until I give the order! Atten-shun!"

BUT now the Blackness was only four hundred yards away. The light around them was turning to twilight. In comparison to the cosmic immensity of the Thing they began to feel a million times smaller than atoms.

They could see in great detail now how the blackness ran up the limbs of trees, taking all with it without disturbing a twig, in disintegrating waves without making a sound.

For perhaps another ten seconds Lieutenant Abingdon Forsythe Miller stood with his back to his men, thinking, racking every shred of knowledge in his brain to uncover the vital fact that would save him and his company. But that vital fact was not there.

He turned toward his men.

And he saw the fleeing backs and flying heels of seventeen men running madly down the path that coward John Carson had taken a little earlier and who was now some two hundred yards down the beach.

All were gone except Ensign Bayer, who stood quietly with his arms folded over his great chest, with some imp within him that made him summon, from some hidden source, the will power to spread a great easy grin over the statuesque muscles of his face.

He bowed and extended a great palm with a nonchalant wave down the beach.

"After you, sir," he said.

Lieutenant Abingdon Forsythe Miller pulled himself up to his full height, and made what was, for him, a rash remark. "Go ahead and run, you reckless fool."

And the two of them, running from a gigantic million mile shadow of nothingness, a shadow of death, began to slog through the soft white sand, at the greatest speed that one can muster when death is not far behind,

But if you can't run from your own shadow, how can you run from one that travels forty miles an hour? It overtook them at last.

Finally old Orian Zatursky sat up in the darkness.

"It can't be the shadow," he thought. "Perhaps I am blind." There was grass under his hands, his fingers pulled at the sod, but around him stretched only blackness.

That shadow. This must be it.

To Orian Zatursky there were many things that had never been explained to him about this universe, and forty-five years of traversing the cold, black vacuum between the stars of this galaxy had taught him that there were some things that one just left unexplained.

He stood up and pulled a long plug of tobacco from his back pocket.

"Mr. Miller?" he called. "Mr. Bayer?"

Then he listened, his keen old ears catching a faint echo of his voice as though he were in a cavern of immense size, and the walls only caught a fraction of the sound.

And there was no sound at all but his own.

Old Orian Zatursky began walking then, across the grass, for there was nothing else for him to do.

"I will look for them," he kept thinking. "For if this darkness ever leaves, they will need me. No one will ever be able to make those motors run except me. They'll never get back to Earth unless I find them."

In a moment he felt the sand beneath his feet again, and he walked straight ahead, for he knew that he was walking towards the water. When he felt the water around his feet, he turned directly around to the right and headed up the beach, for that was the direction of the ship.

The sand was just wet enough so that at each step it made a little squealing sound beneath the leather of his shoes. I wonder if that water is still blue, he thought.

He closed his eyes and began walking in a somnolent, dreamy sort of way, for there was no sense in keeping them open

if you could not see.

And then came weird sounds. Chief Machinist's Mate Orian Zatursky never would be quite sure just when he became aware of it. It was not there one second, and it was there the next. And then he was not sure that it was there at all.

IT was an eerie, fantastic cadence that thrummed upon the ears of the old man. At moments it seemed to him as though it were the laughter, the cheery wail of a million crickets resting in the green meadows of the Don. Then it sounded as though it might be expert violinists playing pizzicati at the same string over and over and over and over again. Sometimes the noise just crawled straight up inside of him, and he could have sworn that the sound of it came from someone playing on his own heartstrings.

There must be something I have to do, thought Zatursky. His soul began crying to him, began to tell him that if he did not do a certain thing that he would be forever condemned to eternal hells. Then visions began to crawl in his mind. He saw two great walls of gleaming white ice before him, and then they were on each side of him, and they were coming closer and closer together. They were going to catch him, to squeeze him between them, to crush with slow but horribly sure certainty the spark of life out of that worn body of his.

He must run, that was what he must do. And he began running, shouting at the top of his voice, for he must get away before he was crushed by the ice.

He ran into the side of something hard. He cut his face on it and blood came down warm over one eye. He no longer saw the ice, and no longer heard the sound.

Orian Zatursky felt ashamed. He had come running down the beach as hard as he could, and had run full force into the side of the ship.

Zatursky got up and ran his hands along the metal bulkheads until he came to the port that led out from the bridge. And now, when he no longer heard the sound, he began to smell a fragrance that was just as wild, exotic, and heady as the

noise that had dinned in his ears a few moments before.

It had followed him as he walked through the passage-ways of a metal hulk that had once represented the peak of man's ingenuity. As he felt his way down those black channels of metal, he occasionally fell over girders and wreckage strewn in his way by the violence of the collision.

And again Orian Zatursky began to feel sad. She was a ship as such he would not have been able to dream of when, as a lad, he first blasted off Earth so long ago in a frail rocket-powered draft.

Soon he was in the engine-room, and here he knew his way about, light or no light, for that had been one of his advancement examinations, to find his way about, and to operate all his equipment in the darkness.

What is that smell?

The air was heavy and thick and cloying, and in the darkness it seemed to Zatursky that there were little elfin fingers which reached for his legs and plucked at his clothes, and who were just nagging him, waiting for him to lie down in rest, hoping that he would fall, for then they would howl in fiendish glee and swarm over his bones, like rats.

"It is a hundred light years to what I called the sun when I was young," Zatursky kept thinking. "Before I was born there was light, leaving that warm, pure sun which I could see now if I stepped outside, and this darkness would leave.

"This smell is like the moist smell that fills the air when they harvest the wheat in the Ukraine, or like the clean sweet smell on the meadow when my Katrinka and I were young and danced. Sometimes it reminds me of the vodka we drank in the villages."

THE heavy service shoes of the old man stumbled over something in the blackness, and the long thin fingers which had a hair-touch on a micrometer reached down into the blackness to feel a human body. They ran over the finely chiseled features of this man who had had the air sucked from his lungs in one great whoosh in the vacuum of space, and they

felt a small amulet which was around the man's neck.

Orian Zatursky fell forward across the body, his thin voice sobbing heavily.

"My son, my son!" he quavered.

How long he lay there, Orian Zatursky never knew. But this odor was like a gadfly, or like a rapier thrust deep into the heart of his grief, it would not let him rest. The elfin fingers were plucking at him out of the darkness again.

To Orian Zatursky there occurred the idea that he might take the small hand light from his safety kit on the wall, and chase those elfin fingers away with light.

The torch would not burn.

He took a cigarette lighter from his pocket and depressed the button. No light.

And then something awful happened to Orian Zatursky. He reached out a long thin finger and stuck it where the flame should have been. And jerked it back as though stung to the bone.

There was heat and fire on that lighter—but there was no light!

Orian Zatursky wanted to scream.

But before he could, the smell grew strong, and then it was as though the top of his skull had been lifted and hot oil poured in to simmer there, and then the hot oil got into his bloodstream and traveled through every vein and artery and through the thinnest of his capillaries.

A dinning thought that thrummed weirdly in his mind over and over again.

"You must stay here on this planet," it said. "You may want to get away, but you will never do it. Your will power is not strong enough to take you away. . . . You will stay! You will stay! . . . This is Sanctuary."

Orian Zatursky dropped the lighter on the floor and fell on his stomach and cried.

"Don't," he sobbed, "Don't! Let me go! Can't you have pity on an old man? I only want to see Earth, I don't want to stay. That's it, just let me see it once again and I'll come back. I'll do anything you say. Only let me see it once again."

The voice of a hoarse old man crying is not a beautiful sound.

Again Orian Zatursky was not aware of how long it was before the noise

stopped and the smell was gone. He lay there, on the cold, beryllium-steel floor, and while he was there some of the steel seemed to come from that floor into the muscles of his body.

I will show them, he thought. They may think they are masters, but I will show them. I know those motors. I will fix them, in the darkness, by my oath and by my honor. I will get back to Earth."

And a tired old man, with grim determination in his heart, went fumbling in the darkness, touching the precision-worked metal which was a joy for him to be near.

CHAPTER IV

Chance for Freedom

Then someone said, "We will return no more;"
And all at once they sang, "Our island home
Is far beyond the wave; we will no longer
roam."

LIEUTENANT ABINGDON FORSYTHE MILLER awoke in the darkness with someone shaking his shoulder. For a moment, all that he could think of was the terror that had clawed deep into his soul when the blackness had overtaken them.

"Who is shaking me?" he said quite clearly.

"It is I, sir," came the gentle voice of Ensign Bayer through the darkness.

"I think you must have made a miscalculation, Ensign," he said drily. "You said there could be no darkness on Sanctuary."

Ensign Bayer was silent for a moment. "Yes sir," he answered quietly. "I said it—and I still say it. This may make a liar out of me, sir, but it doesn't make me a bad astronomer. I checked those calculations all the way in."

Lieutenant Miller crawled slowly to his feet, brushing away the hands which tried to help him. Not that he did not come near needing them. The wound across his chest felt as though salt were being rubbed in.

He heaved a long sigh. "Either you or

this blackness is a liar, Ensign. Which do you think?"

Ensign Bayer's laugh boomed hollowly in the darkness, and the sound seemed as though it were in a vast cavern.

Lieutenant Miller sighed again, then drew himself up to the dignity of his command.

"Where are the men?"

"Around us," said Bayer. "I called the roll a little while back. We figured out that the only ones missing were Carson and Zatursky."

Miller grunted. "Zatursky? That hurts us, if we don't find him. He knew those motors. But that blasted fool Carson is probably down the beach. He had a couple of hundred yards start on the rest of us."

"We called them both, but received no answer."

Lieutenant Miller grunted again in the darkness.

"Got a match?" he inquired.

"Yes, sir."

"Let's see it."

Ensign Bayer was quiet for a moment. "It won't do any good, sir."

"What? What are you talking about?"

"I said it wouldn't do any good, sir. But I know I'll have to show you. Here, take these and strike them."

Lieutenant Miller reached out a fumbling hand in the darkness and took the matches that were handed to him. There were scratching sounds as a match was dug across a shoe sole.

"They're no good, Ensign," said Lieutenant Miller.

"Stick your finger where the flame is supposed to be," said Bayer.

Lieutenant Miller did so, and threw down the match with a lurid curse. And then the enormity of the scene he had just witnessed struck his mind with full force.

"My gosh," he said.

"That's just exactly what I thought," said Ensign Bayer.

Soon Lieutenant Miller instructed the men under his command to spread out and search the beach for the two missing members of the band.

They had scoured the beach for a hun-

dred yards in the direction in which Carson had run when Ensign Bayer began to feel like crying. For once more he was hearing that elfin sound.

He grasped Lieutenant Miller by the arm.

"Do you hear it?" he cried desperately. "Do you hear it? I thought I was dreaming before; I thought no one heard it but me. Tell me do you hear that noise for I must be going crazy."

Lieutenant Miller stopped in the blackness of that planet called Sanctuary, and for a moment he heard no noise.

Then, "There is something—some faint strumming—as though it were harps playing—very far away."

"That is it, that is it! I am not the only one who heard it then."

IN SLOW tones Lieutenant Miller answered him. "But what is the matter with it, Ensign?" he asked. "What is wrong with it? It sounds pretty to me—though a little eerie."

"A little eerie, sir?" The calm Ensign began laughing harshly. "You have not heard it before, sir. But you will know what I mean, soon. For there is no way you can stop it."

And then the sound grew in intensity, and Lieutenant Miller heard Ensign Bayer throw himself on the ground and something like a sob tear from his lips. And from out of the darkness, from out of the mouths of the men who were left for Lieutenant Abingdon Forsythe Miller to command, there came slow murmurs of unease, of fear, and of crazy, deathly terror at things that they had been through and what was ahead of them that they did not know.

To each of them there came the sound of eerie things, of sobbing violins and the wind in the trees. For each of them the sounds and the smells may have been different—but to each there came a thousand interwoven dreams of all they had ever desired—of heady drinks of liquor, champagne which bubbled when the cork was pulled, great symphonies, and color. It brought visions of swimming in clear, deep waters that refreshed like a tonic. All the things that Earth could ever mean

to them returned to their minds. These things came to fighting men in a black blanket a hundred light years away from Earth.

And then came, as Ensign Bayer had known they would, the visions. Some saw ice that would crush them, some saw fire that would burn them alive, some saw monsters that would tear them limb from limb, and others saw hairy insects which crawled all over their bodies and could not be brushed off.

And finally came the fire along the nerve-ends, and then the voice in their brains. "You must stay here on this planet," it said. "You may want to get away, but you will never do it. Your will power is not strong enough to take you away. You will stay—you will stay!—this is Sanctuary."

And then came noise like the screaming fury of a cyclone. At last one by one they dropped exhausted—and slept.

When Ensign Bayer awoke again, the blessed, beautiful sunlight was shining. The afternoon sunlight from one of Sanctuary's two suns.

He got to his feet and looked at the pure blue water, and at the green fruit trees, the thick grass, the plains and the snow-capped mountains in the background.

All was the same.

And yet something kept telling him that it was not the same.

But what was different? He could not tell.

He turned around and saw some of the other men and Lieutenant Miller on their feet. Their eyes were glazed and heavy-lidded and on their faces was blank expression, yet tinged somehow with unrest. He wondered if his own were the same.

Yes, that was it, that was what was wrong. Unrest. It flowed through his bones and made him tense with anxiety to do something, but what he did not know.

Lieutenant Miller spoke dully.

"There will be little sense in working on the motors," he said. "We lack the facilities. And we couldn't make it back to Earth with the ship in its present shape

in a thousand years. We might as well stay here."

Ensign Bayer started to break out in hot speech. To his mind came the haunting, but now blurred, picture of a girl who would wait a thousand years if it were necessary. But that was silly. He wiped his hand across his face. Lieutenant Miller was talking sense. The dickens with Earth! Maybe Sanctuary has people on it.

"But I want to go back to Earth," he murmured. "How? We can't fix the motors. No sense in even trying. We have to stay here the rest of our lives. Mary! Mary! Mary!"

group of men as they moved slowly about the ship.

"Mr. Bayer! Mr. Miller!" His glad old voice cracked with joy. "It's good to see you all again. I have the motors nearly fixed, and our engine-room compartment sealed up tight. She's almost ready to ride again."

Lieutenant Miller stared up into the beaming face of the old man.

"Oh. Didn't you know? We're not going back, Zatursky. We're all going to stay here."

Ensign Bayer began a slow mumble, his face working with agony.

"We want to go back, Zatursky, but we



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"I guess you're right, sir."

And the sixteen men standing around mumbled their assent.

A MELANCHOLY crew of men walked aimlessly down the path towards the ship. And this thing of staying grew and grew and grew in their minds until when they reached the glistening steel which was the side of their ship, they spat upon it as something from an alien world.

From within came a movement and Orian Zatursky stood in the port of the ship, grimy and dirty, a welding torch in one hand. He watched the disconsolate

could never make it," he said. "We might as well stay here. I know that we better stay. We have to stay."

Orian Zatursky stood there. Then his body began to tremble slowly. He thought of the hours of sweat and labor in the dark and then the heat of the welding torch and the straining of lifting heavy weights by himself. He looked around at the faces of those men.

Forty years of Navy regulation broke loose from him then, and he shouted at gold stripes.

"You're fools!" he cried. "That's what you are, fools. It touched me too, but I didn't give into it. What are you, babies

or men? You simple fools. Get in this ship and let's leave this dreary place. Get in, I tell you!"

"We're all going to stay here," said Lieutenant Bayer.

Orian Zatursky waited no longer. He sprang like a fiend from the port down onto the form of Ensign Bayer, swinging the welding torch as a club. There was a solid thunk as it crashed against the Ensign's head and Zatursky snatched the electrode pistol as the officer crumpled.

He waved it around.

"Get in that ship," he said. "Get in before I ray you all down. Get in, I tell you!" His voice, his eyes, were like a whiplash, cracking out with vile hurricane force against the souls and minds of those men. And it was unceasing, relentless, pounding force.

"Get in!" he lashed. "Get in! Get in!"

He went among them, striking men whose senses were too dulled to protect themselves, time and again, like an avenging spirit who would never rest.

And somehow he got all those men in the spaceship.

Some men crawled in under the blast of that fury, others refused and were beaten into submission by an old man's courage and with heavy-handed blows.

Then he clanged shut the port, dogged it down, closed the air-lock forever on beautiful blue sunlight on a planet where it was always afternoon.

But the job was not done. He made his way forward, and with the same fiendish ferocity fed blasts of power to the motors, to get away from a piece of dirt and a fear which would never die in his mind. Orian Zatursky was leaving Sanctuary for the black void of space, and the pleasure was all his.

Single-handed he took the ship away. Single-handed he kept it going for a long time.

With the air system functioning right again, Lieutenant Abingdon Forsythe Miller at last had been able to get to his chest of uniforms, and he looked almost his old self from the outside. But not on the inside.

He was standing on the bridge of the space-ship, talking with Ensign Bayer.

"I hate leaving Carson," said Lieutenant Miller. "I'd hate to leave a dog in that place."

ENSIGN BAYER'S quiet, finely-chiselled face was in repose again, and no one could read the blankness that was there. No one but himself knew that he felt the sadness of losing Carson, of the comrades who had died before Sanctuary. No one knew that his soul had been twisted on the rack until he was almost afraid to let himself go into the wild dream of abysmal joy for fear that he would simply cry in happiness. No one knew that he could not let himself think of seeing Earth again for more than a fleeting second at a time for fear that he would lie down on the floor and be lost in sobs of joy.

"I feel bad about that myself, sir," he said quietly. "But after all he was facing a court-martial, for an offense punishable by death. Maybe it is better this way. Maybe he is in a world now where he will not have to be afraid. And his friends, and parents, and girl will never have to know what happened." Ensign Bayer paused, and the immobile features of his face split into a little apologetic smile. "That is, sir, unless you tell them."

Lieutenant Miller drew himself up. Regulations were fighting hard within his breast. But Lieutenant Miller, the martinet, was quite sure now that there are a number of things not covered by regulations.

"I will not tell them, Ensign," he answered—and smiled.

They both stood there a moment, hearing the muffled thunder of power throbbing out with Herculean energy behind them, driving them Earthward.

Then Lieutenant Miller spoke again.

"Ensign?" he said.

"Yes sir?"

"Can you tell what happened back there?"

Ensign Bayer breathed deeply, his great chest filling out and stretching taut the white cloth of his uniform, and then he sighed. "This was my first cruise to the stars, sir and when I began it, I

knew that there were many things unexplained to me," he answered. "Now I know, sir, that there will be some things in this universe that may be forever unexplained to me, or to the minds of men. For the mind of man is, after all, a puny thing."

"Can't you surmise?" persisted Lieutenant Miller.

"There are some beings there, sir—some wistful, wondrous beings, and the science of what happened to our minds might be explained by so simple a thing as posthypnotic suggestion. But—"

Ensign Bayer paused, and turned to stare out of the spaceport at his side, and from there he could see the heavens strewn before him in their greatest display. Close by there were fiery jewels burning in white splendor. Farther out there were great clouds of white shining dust strewn through galaxies, and there were black unexplainable blots where there was no light, just as they had seen—and nebulae—and little pinpoints that seemed so far away that it hurt the eye to stare at them—and on and on—and beyond that more blackness.

Ensign Bayer shook himself, and turned about. His voice was a little husky.

"When you explain that out there, sir,

I shall tell you what happened on Sanctuary," he finished simply.

BELOW, in the engine-room, Chief Machinist's Mate Orian Zatursky had a rag in his hand, and he kept rubbing it across a piece of shiny metal that was already so shiny that he could see a perfect reflection in it. He was humming quietly to himself.

In the heart of an old man who loved engines there was infinite happiness to know that he had done this, that those straining atoms of energy were pouring out because of his own knowledge, his own sweat, his own hands.

He smiled and stared out of a glassite port towards a tiny star that glimmered way off behind the constellation Orion. And he laughed deep inside himself and waved out the window.

"I see you soon," he said. "Maybe three months—maybe more, but I see you."

He turned back to the motors and there had never been a more infinite ecstasy in his heart than he felt as his hand ran lovingly across the shiny gray metal.

He smiled, then chuckled, then laughed, then sat down and howled until the tears ran from his tired old eyes.

For she was a beautiful ship again.

Coming Next Issue: PERIL ON PHOEBUS, by NELSON S. BOND

I THANK MY
LUCKY STARS
I MET YOU!

THANKS TO
STAR BLADES
I MET YOU!



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PLANETARY PROOF

WHILE men of science have not seriously questioned the probability of planetary systems other than our own in the universe, until recently astronomers have had no proof to substantiate such claims. The first evidence has been submitted by Mr. K. A. Strand, of the Sproul Observatory of Swarthmore College.

In making a painstaking study of a double star in the constellation of the Northern Cross, and by a thorough check of many photographic plates of the circular orbits of this star twin, Mr. Strand was able to note and chart the perturbations in their orbits to the extent that the only thing which could account for the irregularities would be the presence of a third body close and massive enough to affect them.

Calculations indicate a planet with a mass of about sixteen times that of Jupiter which swings around its double-star sun in a lop-sided orbit which takes nearly five of our years to complete. There definitely are other planetary systems in our expanding universe!

REAL ROCKET BLASTS

THE old-time farmer would use a shotgun loaded with rock salt to run petty thieves out of his melon patch or apple orchard. The same technique, according to Professor G. B. Kistiakowsky, ordnance expert at Harvard, is now being applied by the Russians against the marauding Nazis.

They have new projectors built on a rocket principle which fire twenty to thirty shells at once, making a shotgun pattern that Hitler's hoot-owls will find it difficult to dodge.

Two or three other rocket weapons are being tried out on airplanes. One of

these is a rocket cannon open on both ends, the front end to fire a shell and the rear end to emit charges of buckshot to take up the recoil and absorb the shock.

If this Davis non-recoil gun, proposed in England, proves successful, warplanes of the future may be carrying three- to six-inch air cannon. And who wants to argue with an enemy who can shoot both ways at once?

WAR GADGETS

WHICH foregoing Scientifact logically leads us to consideration of several new gadgets brought into being



by World War II. The first is a huge rifle—gun, to you—nearly seventy feet long which the Mesta Machine Company is turning out for the Government. This weapon is so large that it requires a special 84-inch boring lathe to rifle the barrel.

Dogs are carrying pigeons to starting points inaccessible to motorized equipment in special baskets. The birds carry automatic cameras which take photographs at regulated intervals on their flight across enemy soil.

War plants, as well as submarine bases and airplane hangars have gone underground. Aerial machine-guns are equipped with false noses to screen the flash of night fire, much as the silencer muffles the sound.

Steel nets are now manufactured to trap submarines by their hydroplane fins like the peaceful fisherman uses cord

nets to enmesh fish by their gills.

This war may not be civilized, but it is becoming highly scientific. Who will have a slice of fried U-boat Friday?

NEW CROPS

DUE to war conditions it has been found necessary in increasing measure to plant and cultivate things we formerly found it cheaper and less trouble to import. Some of the results are surprising. The use of modern machinery has demonstrated that, where machinery can be adapted to the purpose, we can grow, harvest and market former imports cheaper than importing them—even from countries where labor is plentiful and dirt cheap.

Aside from the mad scramble for natural rubber, evinced in the planting of guayule and the cultivation of the milkweed, there is the almost classic example of the soy bean.

Imported from Asia some one hundred and fifty years ago, the lowly soy bean has, in the past twenty-five years, become such an important crop that 10,000,000 acres are now under cultivation. First grown as forage, the soy bean is now developed for table use, plastics, and an excellent source of cooking oil and flour.

Of the several hundred food, condiment and medicinal plants grown in various parts of the world and imported into the United States, we can successfully and profitably, according to the chemurgic council, cultivate one hundred and thirty-one new crops in ample quantity within the borders of continental United States to supply the need and the demand.

So, what are we waiting for? Hand me my sunbonnet; I'm going out to work awhile in the Victory garden.

EVERY MAN'S MEAT

PRIOR to 1941, of the million pounds of nicotine recovered annually in the United States, most of it went into insecticides. Nicotine is the best known source of nicotinic acid—another name for one of the B vitamin group—which is now used nationally to fortify white flour.

Thus, a tremendous jump from the ten thousand pounds of nicotinic acid produced in 1940 to the three hundred thou-

sand pounds needed this year to mix into flour has used up the reserve supply of nicotine and has opened up fields of re-



search to find greater industrial uses for tobacco in order to increase the nicotine yield.

Today, tobacco yields a highly important vitamin. Who knows how soon the cook books will be including recipes on baked tobacco plant, Havana leaf salad, or creamed Connecticut binder?

SAVING THE PIG'S SQUEAL

CAN you remember the days when you could see piles of metal scrap around junkyards and smithy shops, floors littered with metal shavings in machine shops, careless litters of nails, bolts, nuts, and screws in hardware stores and factories headed for the waste pile? Those days are gone, we trust forever.

The all-out war effort and the shortage of vital materials has resulted in a waste saving throughout industrial America that never before seemed possible. Millions of dollars' worth of metal dust are now swept up from factory floors and converted into hundreds of planes and war machinery.

Westinghouse now reclaims scrap aluminum formerly wasted in the astonishing amount of 120,000 pounds per month. Douglas collects shavings from Dictaphone records—to reclaim the minute amount of several precious chemicals in the wax.

Smoke is trapped in various ways in industrial chimneys to reclaim the minerals and chemicals which once were allowed to escape.

The Ford airplane motor plant derives half its needed electric power by coupling new Pratt and Whitney engines off the production line to house generators when they are tried on the testing blocks. General Electric "pans" nickel dust with a

new process, recovering 20 percent.

Westinghouse refines low-grade ore, salvaging small quantities of gold and tin by an electric-spray process which separates the metal from the worthless rock and sand with 70 percent efficiency. Scrap plastics are reclaimed and made into cigaret cases and novelties. Sawdust is used to make briquets and sweeping compounds. The Buick plant even traps exhaust steam and uses it over again and again . . . and then converts it back into water.

Not only is the law of the indestructibility of matter being proven; American industry is not letting even the pig's squeal escape. When you finish wiping off that engine, chum, pass me that piece of waste; I want to weave a fresh parachute from it.

CRUDE OIL ENGINE

SINCE the re-discovery of the Diesel type engine about forty years ago—the Diesel was first invented in ancient Egypt—this type of motor has made tremendous strides in many fields. One of the least suspected of these is that of railroad engine construction. Starting as a switch engine in 1934, it has been put into all sorts of railroad service until in 1941, out of a total of less than 1500 locomotives of all types ordered, more than 1,000 were Diesels—a percentage of 76 percent.

At this rate it won't be many years before steam and electric locomotives will disappear from the scene.

SUN BULLET!

THE latest theory about the hugest meteor that ever struck the earth—the giant in northern Arizona—is that it came from the sun about 40,000 years ago. It has been calculated that at least five hundred billion tons of earth and rock were displaced, all living things within a hundred miles of the spot must have been killed, and the earth must have staggered in its course.

From the splattered meteorite droplets found up to the present from this "Big Bertha" shell of the past, analysis shows the projectile to have been ninety percent iron and ten percent nickel and platinum.

Only within recent years has the bulk of the meteor been located rather southward of the huge crater it made, and



plans are going forward for mining. In spite of the fact that the erosion of 40,000 years has worked to efface the scar, the pit is still more than six hundred feet deep and a mile in diameter.

Don't you know that's dangerous, Sol? Pegging rocks like that through space!

RADIUM GOES TO WAR

SULPHANILAMIDE is not the only therapeutic agent to join the colors. Radium has come strongly into its own. Prior to the present war an entire year's production of radium salts in the United States was about two-thirds of a teaspoonful. Today, thanks to the pitchblende of the Eldorado mine at the edge of the Canadian Arctic, this production has jumped considerably.

Radium is going into the making of luminous compounds for hundreds of war purposes, from instrument dials to black-out paint.

But its key job right now is in radiography—photography by means of its radiations.

Remarkable indeed is its property of bombarding zinc sulphide with 183,000,000 particles per second to cause a glow in luminous pigments that lasts for about ten years, or until the zinc gives out. But more remarkable, and more important at the moment, is the fact that its gamma rays will penetrate eleven inches of the toughest steel to make an impression on a photographic film in which an unseen flaw in the metal will show up as a black mark on the film. Thus, industry is absorbing all of the available supply of radium to photograph castings, plates, boilers, guns, etc., to find hidden flaws. In fact, these radium "bombs" are used to see through shell casings to eliminate

duds from the munitions on which American fighting men are risking their lives.

Radium, you merit the Order of the Purple Heart!

THAT ROCKET PLANE AGAIN

IN SPITE of the present research into the secret of nullifying gravity by electro-magnetism, until it is solved in a practical fashion, rocket planes will have to depend on the lifting power of wings and the clawing action of propellers through air to get aloft.

Once in the stratosphere, the plane can maintain its flight by blasting rocket jets.

Therefore Dr. Robert H. Goddard of Roswell, N. M., an authority on rockets, has recently patented a turbine to drive rocket plane propellers and which can be detached and cut loose in the stratosphere and parachuted back to earth while the plane roars merrily on its way to its destination.

Sergeant Saturn and Captain Future will have the laugh on some of you doubting Thomases yet!



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"THAT'S FOR ME FOR ENERGY"



THE AMNESIAC

By GEORGE EDWARDS

*Pete-Pete Has a Good Reason for Not Remembering Anything
—but He Forgets It When He Faces the Crisis of Space Battle!*

PETE-PETE SAUNDERS slouched along the main corridor of the battle cruiser *Space Hawk*.

He was trying hard to think, and his usually vacant face showed the strain of the effort. It was not a face made for vacancy, and in moments like these it showed its full strength and power. It was a fine strong face, rugged and handsome. The face of a hero, one would have said, but certainly not the face of a semi-moron.

Pete-Pete was on his way back from the doctor's quarters. There was nothing unusual in that, since Pete-Pete had to visit the doctor every day. It had something to do with his head and with why he was called by the double name of Pete-Pete.

It was hard to explain, but as Pete-Pete had told the doctor, it was all because he so often entertained another guy who went by the name of Peter Saunders. It would have been all right if this visitor had been content with visiting Pete-Pete's room on board the

ship or his house on earth, but he always moved right in and made himself at home in Pete-Pete's head, and that was bad.

Oh, he was a nice enough guy, as Pete-Pete told the doctor, but there was something terrifying about him. He was as smart as all heck and kind and pleasant, but he knew something that Pete-Pete didn't know and that Pete-Pete was terribly and utterly afraid to know. He never told it to Pete-Pete or even mentioned it to him, but every time he visited Pete-Pete's head it lay in the air between them, fearful and waiting.

NOW Pete-Pete plodded on toward the control room without so much as a glance into the compartment after compartment that opened onto the main corridor. He had no thought for the vast mechanical vitals of a space warship, for he was still going over his last conversation with the doctor. There had been the usual questions about that other Peter Saunders, what he was like, what he said

*This Is a Prize-Winning Story in Our
Contest for Amateurs. Meet the Author!*



GEORGE EDWARDS

BORN in 1920, I shortly thereafter started reading science-fiction. Or at least that's how it seems to me, looking back at it now. In fact, I liked s-f so much I made up my mind I was going to be a physicist when I grew up.

So I studied math and science all through high school, and I was a whiz at it. Then during my four years at Dartmouth, I sort of gradually changed over from radio engineering to writing.

I majored in mathematics, but spent much more time over my typewriter. Finally ended up with an A.B. Cum Laude and a prize for my short stories. Dartmouth's math department was even more mortified when I followed that up with a year at the Columbia School of Journalism.

Now figure this one out: For studying Math I got an A.B. For studying journalism and news-writing I got an M.S.—Master of Sciences. So I tried my hand at science-fiction to see if I couldn't effect a reasonable compromise. Hope I did!

—GEORGE EDWARDS



The other Pete Saunders was talking to him

and did, and how often he came.

As usual Pete-Pete had been little help. The stranger just stood there in the back of his mind. Pete-Pete knew he was there, that he looked through his own eyes and heard through his ears and was smart as a whip, but they never talked together—never, that is, except in dreams. And even the remembered dreams were meaningless to Pete-Pete.

Pete-Pete was approaching the control room now, and his face began to light up with anticipation and pleasure. He was going to see his gun again, his long, black, deadly proto-cannon. He was going to touch its smooth cool length, check its direction pedals and lift grips, sit in the comfortable high mounted saddle.

He was a wonderful gunner—everybody said so. He was the best gunner in the fleet, just as his visitor was the

best—the best. . . . For a moment panic shook him as this unbidden thought slipped into his mind, and in an obscure corner of his head he felt the cool knowing presence of his visitor who was the best *something* in the fleet!

To calm himself he tried to think of other things. He concentrated his feeble wandering thoughts on the ever-present dangers on this familiar Earth to Venus patrol, the meteorites, the ether whorls, and the Mercurian counter-patrols. He thought with momentary pride of his gun and of his rank as spaceman, first class.

But the words of the doctor slipped unbidden into his mind and put an end to his mental struggles. The doctor had said not to shut out the stranger, but to welcome him, to try to find out about him and what it was that he knew. The doctor had leaned forward and tapped Pete-

Pete's knee for emphasis.

"Don't be afraid of him, Pete-Pete," he'd said. "He's no stranger. Try to find out what he knows. That's the key to the whole business. It's something you are afraid to know, afraid to admit to yourself. Once you discover it there will be only one person inside your head. Try to like him, Pete-Pete, and pity him. He is tragically unhappy and you can help him."

Funny words to come from a doctor, but this was some special kind of doctor. He never did anything to Pete-Pete except talk to him.

Meanwhile Pete-Pete's feet had at last brought him to the control room. His hand automatically saluted the O.D.'s as he walked on to his gun. It was all part of an everyday routine which had ceased to occupy that childlike mind, or even to make itself known. Once at his gun, he came alive.

There was a pleasure in seating himself at that intricate piece of mechanism. To stamp on the pedals and feel the big cannon wheel to the right or the left, sweeping the saddle in swift arcs about the air-tight gunport, that was living! Somehow as he sat in that little saddle stamping on the sweep pedals, twirling the fine adjustment knobs, checking and rechecking, he was almost a part of that weapon.

Certainly he was acutely conscious of every last detail, right down to the seven tiny Mercurian battle wagons painted on the gleaming black barrel. Seven of them. Not bad for a medium-heavy Proto Cannon.

Then, having assured himself of the perfect condition of his gun, Pete-Pete became gradually aware of the control room staff. They were watching him intently, and in their eyes was the strange expression he so often noticed on the faces of men who were being introduced to him, or who watched him when they thought he wasn't looking.

It had something to do with that other Pete, he knew. Perhaps they were looking for him. Perhaps even, he shuddered at the thought, they saw this stranger inside him.

THEY looked away now as he glanced up at them, and there was an embarrassed silence, broken finally by the Old Man himself, Commander Thorpe:

"Ready for action, Gunner?" he asked.

"Ready for action, sir," reported Pete-Pete, stiffening to attention, but unable to hide the glow of pride it always gave him to respond to that question.

The Old Man nodded. "Very good. Present my compliments to Lieutenant Chase in his room and ask him to report to me at his earliest convenience."

Pete-Pete's face glowed even more as he snapped out his "Aye-aye, sir," and started across the room. Lieutenant Chase, the navigator, had often been at his desk checking his figures during Pete-Pete's long dull watches in mid-space. They had even talked a little, for discipline relaxes under boredom. Pete-Pete's second self was always present when Lieutenant Chase was there, and he too seemed to like and respect the young navigator. Pete-Pete would be honored to take a message to Lieutenant Chase.

But just as he reached the door, Commander Thorpe addressed him again.

"By the way, Saunders," he remarked, gazing abstractedly out at the punctuated blackness of space, "did the Doctor say anything about . . . well, about when you might be . . . better?"

Pete-Pete strained desperately to remember, a process difficult for him at best "No, sir, nothing," he mumbled uncertainly.

The Old Man nodded vaguely as though he hadn't even been listening. "Carry on," he said.

Pete-Pete was half way down the incline that led to the officers' quarters when the alarm gong set up the insistent two-tone clamor that could mean only one thing: Mercurians. Mercurians in their flame-belching little counter-patrol ships, determined that Earth to Venus commerce lanes should not be kept open for trade.

Even before the gong had died away, the calm voice of the C.P.O. reverberated throughout the ship, echoing dully from loudspeakers in every compartment.

"All hands to battle stations," the speakers rattled. "All hands to battle stations. Enemy Task force sighted. Stand by for immediate contact."

No point now in presenting the commander's compliments to Lieutenant Chase. The young navigator was running up the incline toward Pete-Pete at this very minute. And Pete-Pete, hardly noticing him, was headed back into the control room, back to his precious deadly cannon with its sleek length and its seven painted little Mercurian ships.

Despite the steady stream of commands issuing to the various parts of the ship through a battery of phones in the control room, all was now order and system. Headphones had replaced the roaring loudspeakers, and the room was peopled with strange-looking monsters with plexiglass globes instead of heads, and with earphones and microphones projecting out at weird angles from the smooth helmets.

Already the plugs and jacks of the many phones were humming with the complex messages that take an efficient fighting ship into swift and deadly action. Already Lieutenant Chase had seated himself at the navigator's horse-shoe desk, plugged in his phones and was in quiet conversation with his observer, checking course and position.

And now the Old Man seated himself at the other horse-shoe desk, surrounded by his staff. He was the nerve center, surrounded by "talkies," communications men in direct contact with all parts of the ship. He was the brain of the ship, and around him it came alive in an instant, every nerve taut with readiness, every function coordinated for utmost speed and efficiency.

Pete-Pete sat motionless in the saddle of his gun. He was slow and he was stupid—he knew it well. But he was a good gunner, and around him he felt the whole ship. He could sense the tense eagerness of the crew. He could hear it in the terse murmurs of the other gunners that rustled in his phones. Between his knees, under his feet and hands, pressing against his cheekbones, he felt the power of his own gun. Wip-

ping again the foam-rubber eye pieces, he was ready. And standing just behind his mind, he could feel the presence of that visitor, that other self.

IT WAS as calm and as eager as he was, that other self. It was looking around through his eyes as he moved them, and it approved what it saw. It paid particular attention to Lieutenant Chase and the arrangements of his desk and commented to itself. It helped Pete-Pete check up on his helmet and phones. It saw everything Pete-Pete did, and then just a little more. Pete-Pete didn't know what more there was to see, but then he was a semi-moron and it was probably over his head.

And then the bright specks of the tiny Mercurian ships began to show in his sights. He gave a last check to his automatic camera. After all, he wanted credit for all his hits, as much for the honor of his gun as for himself. Finally the decision of the Old Man, interpreted by the nerve-center of the *Space Hawk*, reached him and his earphones whispered briefly.

"Prepare to fire independently, full intensity." And then again: "Range two-seven-hundred. Now!"

These attackers were the new Mercurian experimentals, fast, light and suicidal. They were designed to attack in groups of four or five, racing in close to the big battle wagons to unloose a series of tremendous blasts and then racing out again. But the efficiency of Earth-made cannon and the skill of Terrestrial gunners were proving the experiment a flop. The gunners almost invariably picked off all the tiny darts before they got close enough to release their powerful but short-range poison.

In his automatic and complete concentration even the stranger in the back of Pete-Pete's mind faded away as man and gun fused into a single entity that aimed, took its range from the softly whispering earphones, and fired—all in a single effort of mind. There were no distractions, for the Mercurian guns were hopelessly outreached at this range, and the big ship drove and fought

in complete silence except for the slight drone of the drive, so familiar as to be unheard. There was only the continuous low murmuring of the phones.

Rhythmically and surely Pete-Pete's feet stamped on the pedals, his hands busy with the verniers and firing stud. The big gun whirled through complicated arcs, pausing only to fire a blast before whirling to a new position. Blast after blast sought the tiny elusive splinters shining in the sun. And soon, as the efforts of Pete-Pete and the other gunners on his side of the ship began to take effect, there were fewer and fewer of the dancing motes. And then there were none.

Pete-Pete relaxed just the least little bit—there was no telling when another would whirl around into his range of vision. He became aware once again of the stranger inside his head, became aware that he was not listening to the earphones, but was straining to hear the words of the navigator, impossible through the hermetic helmet.

For the navigator was furiously busy. It was his job to keep the space fighter turning and twisting on an unpredictable course that would nevertheless take the vessel along the patrol lane toward Venus. He had to maintain a running, dodging flight and still keep to a clear and calculated course. His fingers were racing over the electronic calculators as his clear voice called changes of course to the pilot through the tiny mike in his helmet.

Pete-Pete couldn't spare even a glance over his shoulder, but he knew, and the stranger knew, what was going on. Yes, sir, they were still on course and covering their patrol, despite a certain amount of annoying interference.

Suddenly all else faded away again as a tiny little mosquito boat boiled up from nowhere so fast that Pete-Pete hardly had time to stamp on the right pedal. There was a tiny flare of light from its gun port, and then Pete-Pete's hand thumped on the firing stud and the entire side of the attacker flared up brilliantly and evaporated off into space.

But it was a costly victory for Pete-

Pete. Even as he pressed the stud and felt his gun shudder to the blast, he sensed the terrible explosion as the Mercurian's single shot slammed into his beloved gun, twisting and ripping it to shreds. He heard the clang as fragments of the projecting barrel struck his protective shield, heard one bit whistle past him, and then heard the welcome sound of the automatic safety seal slamming across the blasted and leaking gun port.

DAZED, Pete-Pete sat on the floor where the sprung gun saddle had dropped him, trying to assimilate the knowledge that his beloved gun was gone, finished, good only for scrap metal. And then a shout from behind penetrated his helmet, electrified him, whirled him around.

"Lieutenant Chase," the voice was shouting. "Are you all right, sir?"

Behind that Pete-Pete became aware that the C.P.O. was talking into his microphone, his lips plainly forming the word "Stretcher" again and again.

But most apparent of all was that the navigator was far from all right. A jagged splinter of black gun-barrel was sticking out of his back and a little stream of blood was cascading down his jacket as he slumped limply over the keys of his calculator.

"He's out of this fight," said a decisive voice.

Pete-Pete jumped. How could he hear a voice speaking so quietly and plainly when his phone plug had been pulled out as he fell off his gun? Then he knew. That voice hadn't come from outside his helmet. It hadn't even come from outside of his head. The other Pete Saunders was talking to him. He was looking over the shoulder of Pete-Pete's mind and surveying the whole situation.

"No navigator," the voice went on conversationally. "The fight's still on and there's no navigator. You'll have to face it squarely this time, Pete, my boy, for the sake of all these men."

Pete-Pete was scared. "I don't know what you mean," he whimpered. "What

can I do? What must I face?"

And then a remarkable thing happened. Pete-Pete found his mind shoved bodily out of the way, if such a contradiction were possible. He fought for a moment, but he was helpless with shock and surprise. Without so much as a by-your-leave, this other Pete Saunders had taken over his brain and his body. What was more, Pete-Pete had a sudden feeling that it was right, that that was how it should be. But there was little time for him to think just now—the other one was doing shocking things with *his* body.

Even before the stretcher had arrived, he had eased Lieutenant Chase out of his position at the navigation desk, and while Pete-Pete gasped at such audacity, had sat down at the desk, plugged in his phones and run his fingers over the calculator studs in a swift test. His voice, no longer vague and uncertain, was speaking into the helmet mike.

"Last position, course, and speed figures?" it demanded crisply. "Lieutenant Saunders speaking." His eyes darted swiftly about the room and Pete-Pete saw enough through them to increase his amazement even further.

Commander Thorpe, and indeed all the staff not immediately occupied, were staring at him, not in anger or even surprise, but with a peculiar piercing intensity. He even fancied he saw tears on the cheeks of the old communications C.P.O. But then his eyes were kept busy on the desk before him, and he couldn't verify anything.

Figures, numbers and strange symbols jumped across the face of the calculator as the studs clicked and slid beneath his flying fingers. His voice continued to speak briefly into the microphone. Pete-Pete listened to his own voice carefully. It was amazing, but he was beginning to understand some of what it said. Those jumbles of letters and numbers—he had understood them once, known them and used them. He realized vaguely that he could follow to a certain degree the course of the ship as it zig-zagged through space.

And in all this work and excitement

he found room enough in the back of his mind to hold an argument with the invader.

"Which of us is me?" he demanded, a little plaintively.

"Both of us," he replied, "and it isn't going to be easy on you—or rather us—or maybe I should say me. You have a tough few weeks ahead of you. We are going to fuse, my friend, and then you'll know what I know—and that'll hurt."

"Do I have to know? Can't we fuse without my finding out? I'm afraid, awfully afraid."

"Nope. That's why there are two of us. You've refused to know for almost a year, but you won't refuse this time. You'll have to—phew! There it goes at last. Now we can relax and settle this thing."

"IT" WAS the gentle chime of the all-clear bell sounding through the earphones. The fight was over and there would be clear ether right on in to Venus. But that was of little interest to Pete-Pete. He was thinking sadly of his ruined gun as he removed his helmet.

"I was the best shot in the whole fleet!" he said mournfully.

"And I am the best navigator in the whole fleet," replied his alter ego with a gentle, imaginary smile. "The gun's gone for good. We're a navigator now. Stand up and salute the commander like the lieutenant you are, despite these darned first-class spaceman stripes."

It was perfectly true. As the other Pete moved back for a moment and let Pete-Pete take over again, the Old Man had stepped forward and was according him a salute. He was smiling strangely and a bit doubtfully.

"Are you back with us again, Lieutenant?" he asked hesitantly.

Something stirred within Pete-Pete and his voice answered strong and sure. "Yes, Commander, I'm back again at last. Proud to serve with you again, sir, even though I never quite left you." He waved at the ruins of his gun.

The commander smiled with pleasure. "I think you had better retire to quar-

ters, Lieutenant, and rest up a bit. I daresay you've had a shock. I'll send the doctor along presently. He will be most happy to hear that you're back."

"Thank you, sir," said Pete-Pete gratefully, glad of a chance to talk things over with himself.

"So they all know?" he asked himself when he got out into the corridor.

"Yes," he replied, and there was a world of sadness and sympathy in that inner voice now. "I was attached to this ship when I went off on leave, and they kept us on when you came back with me. They all know—all but you." The voice was coming up closer now. It was right behind Pete-Pete's mind, almost touching it. "What happened on that leave? Think! Remember what the doctor once hinted about a faulty electronic calculator. Think of why you utterly abandoned navigation and mathematics, of why you hid away in this unintelligent mind. Think!"

Pete-Pete began to tremble. He had arrived at his cubicle and he threw open the door and staggered inside, looking around without seeing.

"Remember!" went on that calm, tragic, relentless voice, and for a moment Pete-Pete was confused to know which mind was speaking, so near was

the source. "Remember how you spent your leave."

And then in a silent, powerful electric shock the self standing just behind him took a step forward and stood inside him, merging with him, fusing into him, and once again he was Lieutenant Peter Saunders and Pete-Pete was gone forever, melted into this new total state of being.

Once again he was living the final moments of his vacation cruise on his space yacht with his family by his side. Once again he saw Earth loom up in front of him and felt the clammy terror clutch at his neck as the electronic calculator refused to respond to his manipulations, as Earth approached closer and closer and he had no braking computations.

He fell tensely onto his bed as once again his body ached to the crash of his guess-work landing. He shuddered as he felt the second shock hurl the pilot's seat through the gaping split in the roof and land him a hundred yards from the blazing, exploding wreck.

And then, through the widening cracks in his amnesic shield crept the fearful knowledge he had so long kept at a distance.

"My wife! Great God, my wife and both the children!"

Next Issue's Prize-Winning Story in Our Contest for Amateurs

THE BUBBLE PEOPLE

By JAMES HENRY CARLISLE, III

NEW SUCCESS OVER ATHLETE'S FOOT

NEW SCIENTIFIC 2-WAY TREATMENT WITH QUINSANA POWDER - ON FEET AND IN SHOES - IS PRODUCING AMAZING RESULTS. IN TESTS ON THOUSANDS OF PERSONS, PRACTICALLY ALL CASES OF ATHLETE'S FOOT CLEARED UP IN A SHORT TIME.





WONDERS OF WAR

The Role of Science in Combat on All Fronts



"NEW" JAP RIFLE 40 YEARS OLD—The Japanese Army has finally gotten around to converting from a .26 caliber infantry rifle to a .30 caliber job, is touting it as something "new." As it happens, almost all other nations tried out the small-caliber job back in the nineties, when smokeless powder and magazine loading made imperative lighter ammunition than the .45 caliber lead bullet cartridges used up to that time.

America gave up on the lighter gun long before the Spanish-American war, and most other nations followed suit long before World War One. Only Japan clung to its ballistic mistake of 40 years ago. When early successes against ill-prepared foes made the Japs look like supermen, the .26 caliber job was touted as something mysteriously superior. It wasn't.

CASTOR OIL BAD MEDICINE FOR AXIS—Brother Benito and his mob are beginning to wish they'd never heard of castor oil. The nasty stuff is turning up in all sorts of unlikely places, according to J. Edmund Good, vice-president of the Woburn Degreasing Company of New Jersey. Mixed with alcohol, it makes a fine fluid for recoil cylinders, hydraulic brakes and the shock-absorbers on airplane landing gears.

Because it retains its consistency at low temperatures without stiffening when the mercury drops below zero, Russian gunners and truck drivers as well as our Alaskan Air Force swear by it. The horror of every American child is also serving Uncle Sam in a subsidiary form. Converted to sebacic acid, it is one of the chemical building blocks of nylon, from which a multitude of important war gadgets ranging from parachutes to surgical sutures are made.

ELECTRIC IRONS PROTECT PLANES FROM FIRE—A little metal disc that once controlled temperature in the housewife's electric iron now insures our planes against fire. Thousands of these thermostats, about the size of silver dollars, are being turned out as sky firemen according to Walter C. Stevens, Westinghouse heating engineer.

When a fire starts from tracer bullets, leaking gas tank or overheated engine, the high temperature moves a bi-metal disc slightly, closing an electric circuit which flashes a light on the instrument board. This tells the pilot which lever to pull to release fire quenching carbon dioxide on the threatened area.

NEW SUB SAVING DEVICE—Submarine disasters are sometimes caused when the vessel is stuck on the bottom so long that the crew exhausts all air and dies of suffocation. To avert such tragedies, Frederick J. Gray of Cheltenham, England, has devised an airtube-carrying float on which he has just received a U. S. patent.

It consists of a buoyant, raft-like structure recessed into the deck of the submarine, preferably well forward. Its surface is flush with the deck. Below, within the hull, is a motor driven reel on which is wound a tube long enough to reach the surface from a considerable depth. When the ship is stuck, the float is released, carrying the tube to the surface to be used as an air intake.

MULTIPLE SHELL MOLD—Cast steel projectiles are superior to forged or drawn ones according to Donald J. Campbell of Spring Lake, Michigan, who has produced a new method of making them. One critical item in their production has been the necessary support for the core during the process of casting. Mr. Campbell's invention supplies this simply by inserting a stemmed metal cup a lot like a goblet in shape to hold up the core. The cup becomes incorporated into the metal of the shell when the molten steel flows around it.

WARPLANES CAST ON PLASTIC FORMS SPEED UP PRODUCTION—A new plastic to make jigs, dies and forming blocks that will step up plane production has been developed in the Columbia University Chemical Engineering laboratories. The tough ethyl cellulose plastic, says Professor James M. Church, provides a sturdy replacement for strategic materials now in use. It can be melted and cast into required shapes without the use of pressure, at much lower temperatures and with more exactness of mold dimensions.

It weighs a fifth as much as steel, yet has a high impact strength, hardness and durability. As it is adopted, there is every likelihood that large sections of future planes can be stamped out on plastic forms by plastic punches. It will speed up mass production of war planes, now meeting difficulties.

TANK BUSTERS NOT NEW—The tank busters—tractor mounted 105-millimeter howitzers—that blew holes in Rommel's panzer pets at Alamein and Mareth and Gabes are really not a new weapon after all. Our Army had tractor mounted guns back in World War One on which all caliber of cannon and anti-aircraft guns familiar at that period were mounted.



Tubby was gripping the little man's head

TUBBY—ATOM SMASHER

By RAY CUMMINGS

Alchemy Becomes Reality for the Fat Dreamer When He Visits a Wondrous World Under the Droning Voice of a Cyclotron Lecturer!

“AND now, ladies and gentlemen, I'd like to have two of you come up onto the platform. When I finish, I will need assistance in one of these experiments. . . . Two of you now, please. Who will volunteer? Just raise your hands.”

The lecturer paused expectantly. “Ah—there is one. That gentleman there to the left. Come right up, sir. Now—somebody else, please. . . . Don't be afraid, my friends. I assure

you there is nothing up here that could possibly hurt you. I need one more.”

Jake nudged Tubby. “Go on, be a sport. He needs help. You got the brains.”

Tubby extricated his fat little body from the chair arms which wedged him solidly into his seat, and stood up.

“Here I am,” he said. “I'm comin'.”

“Ah, very good,” the lecturer agreed. “Step right up.”

The lecture hall was crowded and dim. Tubby climbed the three steps at the side of the platform and stood blinking in the strong overhead light that bathed it.

"This way, sir. You and this other gentleman, just take these two chairs at the side. I won't need you for a little while yet."

Tubby and his companion volunteered sat down. With his arms folded across his pudgy chest Tubby judiciously prepared to watch the proceedings.

From this vantage point on the platform the glittering array of the lecturer's weird apparatus was in plain sight. There was a large metal electrical gadget with wires and dials and levers that faced the audience; a big black table with globes and glass tubing like a scrambled neon sign; and a few feet in front of Tubby, a big glass globe, like a monstrous electric bulb three or four feet high, inserted into a square, decorated platform.

All the globes and tubes were dark now. They evidently were ready for the lecturer to turn the current into them.

Tubby leaned toward his companion.

"He said he's gonna smash an atom," he whispered. "Think it's a fake?"

"Maybe," the man whispered back. "Maybe not."

HE was a dumb-looking little man. His body was thin, and he had a big head on a spindly neck. His hair was iron-gray, parted in the middle, and plastered down so neatly that it looked like a wig. Too dumb a little guy to spot whether this was a fake or not. Tubby decided it would be best to ignore him.

"—and in the Middle Ages," the lecturer was now saying in his droning voice, "they talked of transmuting the baser metals into gold. Alchemy. A dream born of avarice. A mirage. And yet, ladies and gentlemen, I'm wondering if perhaps they were trembling upon the brink of a great discovery. They never made it. No one of them ever really converted lead into gold."

SNAPPY stuff, this. Tubby listened with keen interest. To make gold out of lead? That would get you rich in a hurry.

"They didn't even know what an atom is," the lecturer was saying. "But we know. And who can say but what in the breaking of atoms—the recombining of their component parts—we may create new substances, new elements. Or make one element from the component parts of another."

Deep stuff. Tubby sat frowning as he digested it.

"And this," the lecturer went on, indicating the big metal gadget, "we call a cyclotron. An atom smasher. You will see, later on, how it breaks up the atoms—sets free their electrons which stream off at infinite speeds."

His voice droned on. It was hot, here on the platform. Tubby wished somebody would open a window. Mostly the lecturer was pretty technical. Tubby decided it wasn't any use going into all the deep stuff, so he let his mind wander on the main conclusion—atom smashing was a good thing to do and maybe you could get rich at it in a hurry.

Tubby decided that when the experiments began he would watch everything closely. . . .

A twitch at his coat sleeve jerked him out of his roaming thoughts. He found a man standing on the platform beside him—a tall, thin man who leaned down and whispered urgently:

"You're Tubby. I've been looking for you. I need your help. Please come."

"My help?" Tubby whispered. "Come where? What for? I'm needed here. Waitin' to help him with an experiment."

The stranger's glance at the lecturer was contemptuous.

"Him! He's just a faker. I'm Professor of the Atom. The only one. The original."

"The real McCoy," Tubby suggested. "Am I right?"

"You're always right, Tubby. But we can't stay here talking about it now. Please come. I'm going on a long trip. I need you."

Before he really realized it, Tubby

had let the stranger urge him out of his seat and through a side door into a corridor.

"But listen, Professor," Tubby protested, "he was talkin' about gettin' rich and—"

"Rich! What does he know about getting rich? I've got the real plan for getting riches out of the atom. The *only* practical plan. And it's so simple. Everything's ready, Tubby. I'm starting tonight. Now."

"And you need me?" Tubby repeated.

That lecturer had been mostly theory, but this Professor of the Atom sounded practical. To get rich, and to start doing it, right now—

"Where we goin'?" Tubby demanded.

They had emerged from a side door of the lecture hall, onto a dim side street.

"To my laboratory. It's just around the corner."

They walked fast. The professor's long thin legs were like scissor blades. He was tall and thin, with a mop of brown-white hair and a white cloth tie around his thin neck so that he looked like a man from a hundred years ago. Andrew Jackson or something. But his voice was snappy and full of pep.

"We can't fail now," he chuckled. "You and me—perfect combination." "You mean, we're gonna get rich in a hurry?"

"Exactly. You always had a neat way of putting things, Tubby."

"Hitting the nail on the head," Tubby agreed.

THE professor's laboratory was on the ground floor of a shabby brownstone building.

"Here we are," he said. "Now we can get started right away."

He switched on the light. It was certainly a queer-looking laboratory. In one corner there was a typewriter on a little table, with an ash-tray piled with cigarettes beside it. What looked like a couple of bathing suits were on a chair, with two pairs of sandals on the floor underneath.

The light came from a low-hanging dome in the center of the bare room.

Under the dome was a big board table and in the center of the table lay a single gold coin. The light gleamed on its yellow grandeur.

"Good lookin' money," Tubby commented.

"A ten-dollar gold piece," the professor said. "All I've got." He seemed embarrassed. "I mean, it's illegal now to hoard them. I borrowed this from a friend of mine. He's a doctor in a hospital—a specialist in tuberculosis, but his brother's a banker. That's how he happened to have the ten-dollar gold piece."

"An' we use that to get rich with?" Tubby interrupted. It seemed a good idea to stick to the main point and skip the details. "We're goin' on a trip? Where we goin'?"

"Into the atom!" the professor said. "My drugs are ready, Tubby. A drug that will diminish our bodies in size. A trip into infinite smallness. We're going into an atom of that golden coin!"

It was certainly a weird scheme. But the way the professor told it made it sound practical. This diminishing drug which would shrink every cell of their bodies in size without altering the shape, sent out an aura—the professor said it was like a magnetic field, only different—which would also affect any object in close contact with the diminishing body.

"So our clothes get small with us?" Tubby said.

"Yes," the professor agreed. "And to get back from infinite smallness—we won't want to stay there, you know—I have an enlarging drug. Exactly the reverse in its action to the other."

Perfectly simple. And they were going to do it now.

"But how does it make us rich?" Tubby demanded.

The crux of the professor's scheme was equally simple. He was over in a corner of the laboratory now, taking his drugs from two bottles and putting them into two small envelopes. Tubby noticed that his thin hands were trembling. He was excited, of course. He had planned this thing for years, had thought about it so much, and now he was actually going to do it himself.

"Take it easy," Tubby admonished. "Don't want any errors there, professor. Don't get them drugs mixed up."

"No—no, of course not. You get undressed, Tubby. You see, we wear these special bathing suits. And sandals. And I have a special belt for each of us, with pouches in it—a little food and water, all we'll need for the trip."

While they undressed, he explained how they were going to get rich. It seemed that, because they were now so large, that gold coin looked smooth. But it really wasn't. When they got small, on top of it, down in it, between its molecules, the gold would be shaggy, then golden mountains, boulders, rocks and stones.

Then all they had to do was take a chunk—big as a man's head maybe—and hold it close to them. The magnetic aura of the drug would affect it so that it would get large with them. And when they got back to this present size, here they would be with a chunk of pure gold as big as a man's head!

A chunk that would weigh a good many pounds. And gold was worth twenty dollars or thirty dollars an ounce!

SO SIMPLE. Tubby's mind instantly grasped the practicality of it. Why, they could make a whole lot of trips doing that! Shuttle back and forth from smallness to largeness like a ferryboat. It was stupendous.

"You're ready now?" the professor asked. "You—you fasten the belt around your waist. Here—I made a big one for you. And we wear sandals. The golden ground will be sharp. Oh dear, what'd I do with the sandals?"

He seemed horribly excited, confused, so that now he was all at loose ends to remember the few things they had to do. Tubby decided that he had better take charge of this expedition.

"Here are the sandals, professor. Take it easy . . . Look, this belt of mine—seems busted here in one place."

The belts had half a dozen little

pouches fastened to them. They were stitched, evidently by the professor himself. Tubby's belt, in one place, had a loose flap where the double layers of leather had not been properly stitched together.

But it didn't make any difference. In a moment now, they were both dressed in the white knitted suits, with the belts adjusted and the leather sandals on their feet.

"I've got about a hundred tiny pellets of each of the drugs," the professor was saying. "The diminishing drug in this envelope"—he displayed the small white envelope—"and in this other, this red envelope, the pellets of the enlarging drug."

"I'll carry that one," Tubby said promptly. The professor was so excited it seemed better not to take any chances. "Gettin' big again—that's important to us, professor. The meat of the whole scheme. Am I right?"

The professor didn't argue. He handed over the little red envelope and Tubby shoved it into his belt.

"Okay. Ready now, professor. What do we take—all the drug at once?"

"Heaven's no! Only one or two pellets. Let's take two. Here—hold them in the palm of your hand. Ready now—we must both take them exactly at the same time."

"Okay," Tubby said. "Now!"

The drug was sort of sickish sweet. Weird stuff that burned and fizzled for a second in his mouth. It made his head reel, and then everything swooped.

Tubby never knew just what did happen, but he must have fallen or the staggering professor pulled him down. He found that they were both on the floor, clutching at each other. But they weren't hurt.

"Oh dear, I had no idea it would be this bad," the professor gasped.

The whole room seemed to be swaying; everything in it shifting, getting bigger; Tubby kept his wits. Somebody had to have steady nerves in this thing.

"W—what do we do, professor? Stand up? We sure gotta do something."

They got to their feet. But you

couldn't stand still. The floor was shifting outward so that it pulled Tubby's feet wide apart and he had to keep moving them.

It was certainly a weird scene. The ceiling was lifting; the walls were drawing back. It was already a gigantic room. Had something gone wrong? He and the professor were the same size as before, but the room was growing.

Tubby mentioned it.

"Oh no," the professor explained. "That's only what it looks like. We're dwindling, so everything looks big to us."

WEIRD but true. The dome-light over the table seemed about twenty feet above them now. The table edge was about eight feet up. The gold piece was up there. The gold piece—

"Hey, professor, ain't we supposed to be up with that gold piece? We better get goin'."

True enough. The edge of the gigantic table was lifting every instant. The poor professor was stricken with horror. "Oh Tubby, we'll never make it."

"Sure we will. That chair. Give a push—help me."

The wooden chair was already enormous. And heavy, so that it was all Tubby and the professor could do to slide it to the table.

The lanky professor was better at climbing than Tubby. They helped each other and within a minute, panting, just about all in, they were up on the table-top.

But there was no chance to rest. The table-top was a big, brightly lighted expanse of rough wood with the gold coin lying in its center. It was a huge coin. It was ten or fifteen feet away, and every instant shifting backward.

"Ain't we supposed to stand on top of that gold piece, Professor?" Tubby panted.

"Yes. Oh dear, yes—"

"Well then we sure better be gettin' there."

It was now or never. They ran over the swaying table-top. The coin was two or three feet thick when they

jumped up on it. Tubby gasped at the new weird scene. It was a circular golden expanse, twenty feet or so from here to its opposite edge. Already it was rough with inch-high ridges. Like a big golden map. A gigantic face, with a crown.

"My gosh, look at Liberty! Quite some face, eh, Professor?"

They were standing now down by the bottom of the throat.

"I had the eye in mind," the professor murmured. "A good place to go down."

It was quite a walk to the eye, and every minute it was getting farther away. They went up over the ridge of the chin. The nose was quite a little hill. From the top of it the golden disc was now at least a hundred feet across, with an abyss beyond the circular brink down to the wooden plain of the table-top.

"The drug—still accelerating," the panting professor murmured.

He was clinging to Tubby's arm, and suddenly Tubby had a horrible realization. The professor was getting small! He had been much taller than Tubby a few minutes ago, but he wasn't now! His head only came to Tubby's shoulder!

"Professor! Oh, my gosh, what's happenin' to you?"

In all the excitement, the professor himself was just realizing it. He stood stricken.

"I—I'm getting smaller, much faster than you," he stammered. "The diminishing drug—I—don't know—"

"You must have taken too much. You said two pellets."

"Yes, two. I—I think I only took two."

Or maybe his constitution was weaker than Tubby's, so that the drug worked faster on him. Whatever it was, he was certainly going into smallness too fast. He was a midget now, his head below Tubby's waist. His thin face stared upward, horrified.

"Maybe you better take some of the enlarging drug," Tubby suggested. "Slow you up a bit."

"Y—yes, maybe. But I was thinking—I wouldn't dare—both drugs working at once. I wouldn't know what—"

True enough. The thought made Tubby shudder. A person getting large and small, both at once, might get torn up quite a lot.

THE professor's head was down by Tubby's ankle in another minute. He was shrinking before his eyes. His thin little voice floated up.

"Don't move, Tubby! If—if I get so small you can't see me, don't move."

A step would trample the professor, mash him like a bug. And if he got so small you couldn't see him—what a horrible thought! Tubby would be alone here in all this expanding chaos. Lost in size! Then he had a brilliant idea.

"I can carry you, Professor. You hang onto me and we'll always be right together."

He stooped, snatched up the professor's little figure. The professor gasped, breathless. Then he was standing dizzily on Tubby's shoulder, clinging to Tubby's ear.

"Good idea," his tiny voice panted. "If—if only I'd not get any smaller."

Luck was with them. The professor seemed to have steadied now at about six inches high. He and Tubby were now getting small at the same rate. It left Tubby in complete charge, with full responsibility for everything.

"Get us to the eye, Tubby. You want to climb down into the eye." The professor's tiny voice was a murmur in Tubby's ear.

"Sure. I'll do that."

But it was easier said than done. Time had passed, and the swaying golden scene was now startlingly different from what it had been before. There was nothing here but smooth, gleaming golden rocks. But they were broken now with crevices, ravines, little ridges and valleys.

Tubby tried to dope out just where he was. This hill was Liberty's nose. He started running along the ridge. And suddenly he saw the eye. It was a gloomy-looking pit off to one side. He made for it.

How he happened to slip and fall, Tubby never knew. The corner of the eye was smooth and steep. The tiny professor squealed in terror, with his

hands gripping Tubby's ear-lobe like pincers as Tubby's feet went out from under him.

He didn't exactly fall. He sat down forcibly and slid, feet first. It was a long slide. A hundred or two hundred feet down, maybe, into the glowing yellowish darkness of the eye-pit. It ended with a horrible bump.

"You all right, Professor?" Tubby gasped when he got his breath back.

"Yes, I guess so. I'm still here." The professor's hands twitched at Tubby's ear. "Where are we?"

The bottom of the eye was a pit with smooth and shining walls. But in a minute it was a huge valley, with broken mountainous sides. All gold. Pure gold. It gleamed with golden light. But there weren't any loose chunks. Not yet.

"We should've brought a pickax," Tubby said.

"By the time the drug wears off there'll probably be loose rocks," the professor declared. "Everything's going fine, Tubby."

It was indeed. All Tubby had to do now was run and jump down into the little crevices which everywhere were opening up, each crevice in another minute becoming a huge valley. He stood in one, gazing at the golden landscape with the professor clinging to his ear.

And suddenly, in the distance, something was moving! A long reddish thing, like a monstrous twenty-foot snake! A red boa constrictor, bumping, wriggling on the ground!

"Professor! Oh my gosh, Professor!"

Not one red boa constrictor, but a dozen! Tubby saw them now, everywhere he looked. A dozen? There were a hundred—maybe more. Twenty-foot snakes. But while he stared, stricken, they had enlarged to forty feet—a hundred feet. Horrible red things. The valley was alive with them.

AND now they saw Tubby, and came lunging at him! The little professor saw them.

"Oh!" he squealed. "That friend of mine who gave me the gold piece—I told you he's a specialist in tuber-

culosis. He shouldn't have given me the gold piece without sterilizing it!"

The germs of tuberculosis! No wonder it was such a mean disease. But Tubby had no time to ponder the medical side. The red monsters came plunging. He turned; ran. But there was no place to run to.

Then he saw a crevice, jumped down into it. It was a deep but narrow recess. Its walls squeezed his fat body just for an instant. Then they expanded outward. Tubby crouched. There was a red blur overhead and, in the silence, a horrible scratching sound.

The tuberculosis germ! It was up there. But it was too big to get down here! For a second it scratched and clawed, trying to reach its tiny victims.

Then it must have lunged away. The yellow sky over the top of what was now a huge deep canyon showed again as the red blur disappeared.

"Okay, Professor," Tubby chuckled. "That baffled 'em. Pretty neat, eh, Professor?"

The dimishing drug at last was wearing off. The swaying scene was steady. In another minute it had stopped. Tubby stood gazing around at the tumbled, golden landscape. Mountains, canyons, yawning little cave mouths. Rocky golden defiles that led off into the gleaming yellow distance. Buttes, boulders, rocks and stones were strewn everywhere.

Loose gold stones! They were here in profusion! Thousands of them, some like pebbles, some as big as a man's head!

The end of the journey! A billion dollars was here, and all you had to do now was pick it up and take it back home.

"Lookit, Professor! We've arrived. Here's the gold. Everything's jake now."

It certainly was. And the whole adventure had not taken more than an hour. In another hour they would be back home with a chunk of gold worth maybe quarter of a million. And then they could come in again. Make two or three round trips a day easy enough.

Tubby put the tiny professor care-

fully on the ground and they sat down to rest and talk things over. The professor squatted on the tip of Tubby's sandal.

"We gotta duck them germs on the way out, Professor."

"That should be simple," the professor said. "We'll go out some other way. We probably couldn't find those germs again in all this vast desert, even if we wanted to."

"But we don't want to," Tubby said. "Am I right? An' listen, I was thinkin'—when we take the enlargin' drug, you take yours first so maybe we'll hit about the same size for the trip."

It was a good idea. The professor at once saw the merit of it.

"Well, I'm ready," he declared. He hopped from Tubby's sandal. "Oh dear," he added. "Those pellets of the drug—they'll be too big for me. I'll have to chip a piece off one of them. Let me have one."

But that would be simple. Tubby was fumbling in the pouches of his belt. One of them had a little vial of water. Another held chocolate malted milk tablets. But the little red envelope was not here! Frantically, futilely Tubby searched. The enlarging drug was lost!

So near and yet so far! Everything so perfect, and then complete catastrophe. How could you shuttle back and forth like a ferryboat when you ran out of gas at the end of the first trip?

THE enormity of the disaster struck Tubby and the professor into complete despair.

"We're marooned, Tubby. Marooned forever in infinite smallness." A million miles from the outside world. Despairingly the professor explained it. For all their lives they could climb and climb in this golden vastness and never have the least chance of emerging.

How long they stared blankly at each other Tubby never knew. Then suddenly the tiny professor squealed:

"What's that off there? Put me up on your shoulder! Hurry!"

Tubby lifted him, and again he clung to Tubby's ear. Something was moving in the glowing yellow dis-

tance down one of the golden defiles. A figure hurrying along. A man!

He saw Tubby. He stopped, looked frightened. The gold light on him now showed that he was a little man, but strong and wiry. A tattered gray cloth draped him. His head was overlarge, wabbling on a stringy neck. A bald head, with just a fringe of scraggly white hair. He had been mumbling to himself, but now he stopped, and stared speechless.

"Hi," Tubby said. "We're from outside—got small an' came in. Where'd you come from? Say, you got any enlarging drug, by any chance?"

The weird little man only stared. Evidently he didn't understand English.

But he did! For he mumbled suddenly:

"Me? I live here. I—I guess I wish I didn't. All this trouble, this terrible trouble."

He proved to be a talkative little fellow. He didn't seem the least interested in where Tubby and the professor had come from. Too dumb maybe to understand it anyway.

"You're in sympathy with Alluria?" he demanded. "You're not one of that rabble of dirty villains—"

"We sure ain't," Tubby said promptly. It was one of those situations where skillful repartee was necessary. "We hate 'em, same as you do."

Into his ear the professor's tiny voice whispered:

"He's one of the atom people, of course. They speak English, naturally—an American gold piece—every atom of this gold has always been in America. Draw him out, Tubby."

"I'm a Doctor of Nothingness," the little man was explaining. "The smartest man here in Alluria." He had a little bottle in his hand, with a nozzle on its top. He waved the bottle. "With this, I could fix all our trouble. I've been trying to make up my mind to use it. But it's so dangerous."

Tubby gulped. "A Doctor of Nothingness?"

"Yes. That's me."

"W-what you got in that bottle?"

"Nothingness," the little man declared. He looked awed, almost frightened. "All the Nothingness in the Universe. I've collected it, and I've got it—right here in this bottle."

It must have been an immense task, judging by the awe and pride in his voice.

"Oh," Tubby said. "And so what, Doc?"

"If I let it loose on these miserable villains—" His voice broke and he shuddered. "I can do it, too. This nozzle, and the Nothingness is under terrible pressure in the bottle—"

It was evidently a highly technical subject.

"Who are these villains?" Tubby demanded. "Where's Alluria?"

"Alluria?" The little man waved his skinny arm. "It isn't far. You can see it, just around that bend of the canyon. It's so beautiful." He sighed.

"And the villains?" Tubby prompted.

"It's that Torhgg," the little man said. "Sometimes he calls himself Targ, and Tork and Togaro. But he can't fool me. And now he's got hundreds of the criminals we've banished into the distant deserts. He's rounded them up, and they're coming to attack us. Hundreds of them—to attack Alluria. To make our people slaves. Why, they made an advance raid a few times of sleep ago. Captured some of our most beautiful girls."

DASTARDLY, murderous villains. It was evidently a drastic situation.

"You say they're about to attack your village?" the tiny professor's voice demanded from close by Tubby's ear.

The Doctor of Nothingness stared. "Is that alive?" he demanded. "I thought it was just an effigy, an ornament."

"He's my friend," Tubby said. "He's too small, but that was an error."

There was no time to go into such details. The situation here was much too drastic.

"When d'you expect this attack?" Tubby asked. "Where are these vil-

lains? Are they near here now?"

It wasn't necessary for the Doctor of Nothingness to answer. From down the golden canyon, in both directions at once, hoarse cries sounded. Torhgg and his criminal band!

They came into view at the same instant—two groups of them—a hundred maybe in each. Brawny men draped in tattered clothes. Men with longish, matted black hair. They were waving swords and spears of gleaming gold. Already Tubby and the little doctor had been discovered. With shouts of triumph the rabble came running!

It was a moment where presence of mind was completely necessary.

"We gotta run," Tubby decided.

With the professor clinging to his ear and the Doctor of Nothingness scrambling beside him, he ducked into a side canyon. For a moment it was empty. They dashed up an incline, came to an upper little plateau.

Alluria! The gleaming golden village of squat little houses was visible about a mile away. A river ran past it—water that glowed like silver. Pale-blue trees stood with graceful arching branches beside the river. Fields where food was growing were off to one side.

It was a beautiful place, but now it was in a turmoil. Faint cries sounded from off there. The people of the village were all in terror. Already Torhgg's men were attacking. Tubby could see maybe a thousand of them plunging over the rocks, waving their naked gold swords as they ran murderously forward!

It was obviously a tough situation to fix.

"Listen, Doc," Tubby choked. "Your bottle of Nothingness—"

The professor's tiny voice in his ear interrupted him.

"Tubby! Look out! Run—run!"

Too late! In a rock recess near at hand a squad of the villains lay in ambush. They jumped up suddenly now and in a second Tubby and the doctor were almost surrounded. Twenty or thirty brawny, scowling men were closing in menacingly.

"We give up," Tubby shouted. "Take it easy now."

"You stand over there," one of the men growled. He turned to his fellows. "The master is coming. Safer for us if we let him handle this. He may want these strangers taken alive."

"He probably does," Tubby agreed. "But so help me, if you start anything—"

With the trembling doctor beside him he backed slowly against the gleaming wall of a little golden cliff. There seemed a cave-mouth further along. If he could duck into it—

"Torhgg!" the villains shouted. "The master! He comes!"

Torhgg was easy to distinguish. He was a big swaggering fellow in gaudy drapes, coming around a bend of the canyon. Little metal ornaments that hung on his arms and legs tinkled as he walked. Another group of the rabble was with him. And around him were his captives—half a dozen beautiful young girls, slim, with flowing pink and blue drapes and flowing golden hair.

IT MAY have been sight of the captive maidens that inspired Tubby. Whatever it was, abruptly he thought of the doctor's bottle. If ever there was a time to use that bottle of Nothingness, this surely was it!

"Doc," Tubby murmured. "Your bottle—"

The little doctor evidently had come to the same conclusion, but his hands were trembling so that he nearly dropped the bottle. Torhgg, with the captive girls around him, had stopped, and one of his henchmen was pointing out the trapped enemy.

It was now or never.

"Gimme that!" Tubby murmured.

With a swift reach he snatched the bottle. There wasn't any use stopping to figure out how the spraying nozzle worked. Tubby was too much a man of action for that. He gripped the little bottle, and all in one motion he flung it.

His aim at Torhgg was bad. The hurtling bottle went sideward well over Torhgg's head and struck a rock fifty feet behind him. There was a crack of tinkling glass and a weird sort of sizzling puff.

Ghastly thing! Half the landscape, off to the right, was abruptly missing. There was just Nothingness. No rocks. Not even any sky. Just a weird leprous brink of ragged rocks from here out to the horizon. And beyond it—just blankness! It was like a picture half painted and the other half untouched.

For that second everyone, including Tubby, stood amazed, stricken, numbed. Half of Torhgg's men were gone. But Torhgg himself was still here, for that moment stiffened with terror. All his remaining men were confused.

The captive girls screamed, then they broke away and ran at Tubby for protection. The little Doctor of Nothingness was standing awed. Into Tubby's ear the tiny professor was shouting something. But Tubby was too busy to bother with him.

"Get into that cave!" he shouted at the girls. "I'll protect you. Make it snappy."

They ran. Beautiful little creatures with flowing drapes and flowing hair. Protect them? Tubby suddenly realized that the general who fires his last round of ammunition and kills only half the enemy is in a bad way. Torhgg had recovered himself. With a bellow of rage he waved at his remaining men, and all of them came at Tubby.

Horrible moment. Futilely Tubby was fumbling at his belt with the vague thought that he could throw a bottle of water at the enemy. But all his fingers found were little tablets of chocolate malted.

And then his heart leaped. What was this? His fingers clutched a small envelope. A red envelope. The enlarging drug! It had been in his belt all the time, caught under the loose flap where the leather layers were not stitched together properly.

The enlarging drug! Just the thing in this emergency. He had no time to stop and measure out pellets. With a swift pull he ripped off the end of the envelope, tipped it over his open mouth so that all the hundred or so pellets landed on his tongue.

It was almost an explosion in his mouth. But he held his lips together,

with his cheeks puffing, and swallowed hard.

The internal chaos was pretty bad, but Tubby kept on his feet as he clung to a rock, with his head reeling. A rock? He found the rock shrinking beside him, like an ice-cream cone with a blow-torch on it. Everything was shrinking. In the chaos he had a vision of the dwindling Torhgg and his murderous villains standing gazing in stricken horror.

Girls' voices were screaming. Then Tubby saw the cave-mouth into which the girls had gone. He staggered for it, saw that it was shrinking like a fish's goggling mouth with closing jaws.

GOING into that cave was an error. But those girls must not be so frightened. He would tell them they were safe now. He would have no trouble killing all these dastardly villains and saving Alluria. The cave glowed yellow. The girls, no taller than his knees now, were huddled together in one corner.

"It's okay," Tubby panted. "Hold everything, girls. I got this thing licked."

But he was wrong. The cave was shrinking with horrible rapidity. Tubby decided he had better get outside and bash up the villains. But the hole through which he had entered was gone!

Not exactly gone. He found it, down by his knees—a little opening about the size of his head. This tiny cave! The ceiling had come down and was bumping him; the walls were closing in on him.

The professor was gone from his shoulder. Or maybe he was there, too small now to be noticed. The girls were all yelling—tiny voices somewhere here in the dimness.

Back into largeness. He was certainly going there in a hurry. Then he realized that his body had filled the cave. More than filled it! Rocks began to crash. In all the chaos, Tubby suddenly had only one thought. The gold! He mustn't go back into largeness without a hunk of gold. One as big as a man's head. He found himself seizing it as his giant body burst

out of the cave with a crashing, grinding roar that tumbled everything on him like a million tons of bricks which he was trying to heave off.

He was lying in broken wreckage. Still clinging to the chunk of gold—a chunk big as a man's head. Half a million dollars, maybe . . .

Queer, the golden chunk seemed to be trying to get away from him. But he hung onto it, fighting with it. Then voices were shouting, a whole mess of angry voices.

Was he lying on a floor, wrestling with the chunk of gold? Glass was breaking. It sounded more like glass now, than rocks.

"Leggo of me, you maniac!"

The gold chunk jerked in his clutching hands. Then the darkness swam into light—the light of the lecture platform.

The heavy chairs in which Tubby and his wizened companion had been

sitting were overturned. It was the little man's head that Tubby was gripping as they lay in the broken glass wreckage of the cyclotron apparatus!

People were rushing at them. The lecture hall was in a turmoil.

"He's crazy! Get him out of here!"

"Leggo of me, you maniac!"

The lunging little man jerked his head from Tubby's hands. It went, and it left Tubby gripping the man's gray-black wig so that he lay in the glass wreckage, clutching his bald pate and yelling with anger.

"Get him out of here! He's smashed up all my apparatus!" That was the lecturer's horrified voice.

"Out with him!"

An atom smasher . . . That was Tubby's vague confused thought as strong hands gripped him by the coat collar and seat of his pants, and bounced him out through the doorway.



HEADLINERS IN THE NEXT ISSUE

WHAT would you think if you had a very bad nightmare in the day-time? Probably just what the hero of Fredric Brown's novel of the space patrol of the future thought. That's why this rousing, gripping tale was called **DAYMARE**, and it will have you talking to yourself before you have finished it—if you find the time to draw a deep enough breath.

* * * *

ON the heels of that swift-moving story comes another stirring space yarn of **PERIL ON PHOEBUS**, by that favorite author, Nelson S. Bond. In this story of the spaceways you will find men in conflict on a pioneer satellite where the laws of physics and chemistry come to the aid of sorely pressed men of the law.

* * * *

NEXT in line comes another smashing novelet by Robert Moore Williams called **MAN FROM THE STARS**. In this intensely gripping and poignant novelet the usual pattern is reversed, and we have an exile from a distant universe trapped here on Earth. The way Author Williams works the proper solution out is going to surprise as well as please you.

* * * *

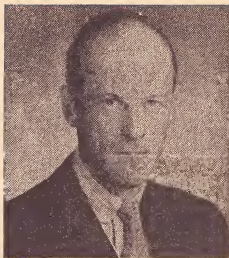
DOWN for fourth place we have another one of our *Amateur Prize Stories*. **THE BUBBLE PEOPLE**, by James Henry Carlisle, III, is an unusual sort of little yarn—a chapter out of the history of the ancient Martians. A large majority of you are going to like this little tale very much.

* * * *

EVERY so often an especially strong article or story fairly leaps out to rivet attention. In next issue there will be at least three such short stories in addition to the headliners mentioned above—and you can be sure of a gala number!

* * * *

ROUGH and ready, but with a heart of gold, that old space dog, Sergeant Saturn, will be in the astro-gation chamber to check the cargo of departments, ride herd on things in general, and rebuff the aspersions of unruly but indispensable kiwis and pee-lots.



DENNING MILLER

ACTION + WAR BONDS = VICTORY

By DENNING MILLER

Author of "Popular Mathematics"

I DON'T need any head for figures—you don't have to be a mathematician—to know why we should all buy War Bonds.

They'll add the tools of war to our forces overseas; they'll subtract the threat of dictatorship from our democratic way of living; they'll multiply our defenses and divide our enemies. That is as obvious as arithmetic.

But to buy one bond or a few stamps reduces the highest common factor of our patriotism to a single operation.

We must integrate our buying continuously over every week—on every pay-day.

And this process—on which Newton and Leibnitz founded the Calculus more than two hundred years ago—is right now the best way to win this war in the least possible time.

So let's start counting—1, 2, 3, 4 . . . a billion dollars at a clip. And show Morgenthau that he isn't the only man in the country who has a head for figures!

A WAR BOND MESSAGE FOR ALL AMERICANS!



Hawthorne found himself being firmly herded into the lock of the NEPTUNE

SUN ENGINE

By OWEN FOX JEROME

The "Space Corsair" Pirates an Amazing Invention, but He Neglects to Master the Fundamental Principle on Which it Works!

PUBLICITY! Entirely too much publicity. That was the trouble with those news-mad reporters for World Telecast, Incorporated. They pestered the life out of a simple inventor over an ordinary development of an idea fully four thousand years old. Hadn't Hero of Alexandria invented the æolipile about 130 B.C.? Hadn't the ancient Egyptians used sun mirrors?

"Of course!" snorted Professor Amos

Hawthorne to himself testily. He was completing his check of the list of supplies to make sure that the last item had been stowed aboard the space ship. "Why did they have to give me such world-wide notoriety? I'll be the laughing stock of the entire System if I fail now."

But Professor Hawthorne knew he would not fail. He had already demonstrated this fact with working models. Only there were a couple of insurmount-

able conditions which forever barred his invention from filling the void soon to face the confederated planets by the rapid depletion of U-235, the universal space fuel.

However, the inventor had never intended proffering his more or less mechanical invention as a substitute for atomic fuel. It was highly important, true, but it was just a stop-gap, a contrivance to husband the rapidly diminishing and increasingly precious U-235.

The *Neptune* was at last ready to make her maiden voyage. The aging Hawthorne glanced around the control room once more and then got to his feet. He had to get some rest. Tomorrow was the great day. At ten o'clock, Solar time, in company with two dignitaries, three spatial engineers from three interplanetary lines, an expert astrologer and a member of the space police, Professor Hawthorne was to take to space—destination, Venus.

He trudged wearily out of the ship, snapping out lights as he went. Outside the craft, he paused in the darkness before closing the entrance port behind him. He breathed deeply as his proud old eyes lovingly took in every line of the *Neptune*, visible in the starshine. And there was plenty that was easy to see. For the space ship, conventional in general shape, was a distinct departure from the usual teardrop design of space craft.

Studded all over the vessel were huge circles of cunningly fitted prism glass with shutter covers that could slide over the two-foot circles and mask them like the shutter of a camera. With the shutters open, as they now were, the ship gleamed under the starlight like a giant-sized teardrop pendant of a gem-studded lavalier. Interspersed between the prism glass discs were the vision ports of the ship. The whole effect was of a fat cigar bedecked with sequins.

This was part of Professor Hawthorne's invention—utilization of an old principle, rather. The other part, of course, was the flexible system of high-pressure stern rockets—like pliant hose nozzles. The whole thing was ingenious and simple, as many successful inventions were.

THE professor fixed his gaze on the bright star just visible above the horizon. Tomorrow by this time he would be well on his way to Minos, capital city of Venus. If only World Telecast hadn't been giving him and the *Neptune* such a lot of advance publicity, the professor would have been happy. Suppose the Space Corsair, greatest brigand of the Fortieth Century, had paid any attention to the enthusiastic television accounts. He might take it into his head to have a closer look at this marvel of space which was to conserve the universally precious atomic fuel.

Professor Hawthorne started as a pleasant voice spoke behind him out of the darkness.

"Good evening, Professor Hawthorne. Last-minute check-up, eh?"

The old inventor twisted his head and found himself ringed in by three men who must have been lying in wait for him. They were snappily dressed individuals, wearing the latest style of plastic garb. One of them considerably snapped on a cold glow-light so the inventor could see them well.

"Who are you?" Hawthorne demanded angrily. "How did you get inside this enclosure?"

"My name is Marlowe," informed the man with the light. "I am the feature reporter for the teletype microfilm section of World Telecast. These are my assistants. We would like to trouble you for a final interview for the microfilm breakfast broadcast tomorrow. The whole world is sharply interested in your revolutionary discovery."

Pesky reporters. Worse than Venusian march hares.

"Haven't you given me enough trouble?" complained the old man bitterly. "World Telecast almost prevented the completion of the *Neptune* by being so much bother."

"But not the print section," Marlowe said soothingly. "We've got to know all you can possibly tell us about the working of this ship before you leave Earth."

"I have nothing to add to the already too great notoriety," declared old Hawthorne with some asperity. "A full ac-

count of everything is already in the hands of Interplanetary Government, and I have mailed plans and a scientific paper to the Society of Tri-planet Engineers. Now, if you will please excuse—"

"Don't be like that, Professor," interrupted Marlowe. "Lead the way into this ship and give us the information."

Before Hawthorne could protest further he found himself being politely but firmly herded into the lock of the *Neptune*. Surrendering helplessly, the inventor led the way to the control room and snapped on the lights.

"There is little enough to tell you," he said curtly. "The principle of the *Neptune* is merely the employment of cheap and plentiful fuel for space flight to conserve the diminishing atomic fuel. Even this couldn't go on forever, but it will serve until science discovers something else."

"Is it true, Professor," asked one of the reporters, a lean-faced man with alert black eyes, "that the *Neptune* is powered by water?"

"By steam," Hawthorne corrected simply. "The ship has a tremendously thick double hull which is filled with water. By an arrangement of my own, this water is heated into steam by the prismatic mirrors set in the outer hull which collect and concentrate sunlight. The steam is piped to the special flexible nozzles installed above the regular stern rockets and only a minimum amount of steam from the fine nozzle jet is required. Out in free space, in the full glare of the Sun, steam power is constant and the release of high-pressure steam through the stern nozzles, as fine as the jet is, is sufficient to kick the craft along at a slowly increasing speed.

"There is no great maneuverability, and there is a great deal lacking in power, but it is sufficient to push commercial freighters and pleasure craft between here and Venus where power and speed are not essential. Of course, the regular rocket installation for atomic take-offs and landings could not be dispensed with, but out in space the *Neptune* can travel along on steam power. I simply applied the principle of Hero's æolipile, using water for

fuel and the concentrated energy of the sun for constant heat.

"Of course, there are some drawbacks. For instance, it isn't practical to ply between Earth and the outer planets. In the first place, the water lasts only long enough for the trip across and has to be replenished for the return trip. Mars has no water to spare to be shot out and dissipated in space. Only such worlds as Earth and Venus can spare water in prodigal quantities. And, as I pointed out, this could not go on indefinitely. But it will relieve the acute situation. By carrying only enough atomic fuel to take off and land, the Hawthorne sun-engined ships can save a tremendous amount of uranium."

"How much spacing can you get out of one load of water?" demanded Marlowe crisply.

"Theoretically, without stopping, as far as the orbit of Jupiter. Momentum in free space has a lot—"

"That's all I need to know," Marlowe cut him off. "Show us how your ship works."

"But there are other things to be taken into consideration and—"

FOR the first time the professor really felt uneasy. Marlowe's pleasant expression had disappeared. His face looked cruel and cold under the ceiling lights.

"No dramatics, Professor," said Marlowe in a level, metallic voice. "Just show Reddick there how this craft works. He is an expert astrogator."

"Reddick!" gasped Hawthorne, paling. "The lieutenant of the Space Corsair?"

"You are astute, Professor Hawthorne," said Marlowe. "Demonstrate!"

"You!" cried the aged inventor in alarm. "You are the Space Corsair!"

"Demonstrate!" reiterated Marlowe coldly, relentlessly.

Trembling, Professor Hawthorne complied. When he had explained the system of shutter controls for the prisms, the switching of power from the atomic engines and rockets to the steam nozzles, and various technical details, Marlowe nodded at the third man.

"Seal the ports, Adams," he ordered.

Then, to the inventor: "Adams is the finest engineer in space. We are taking off tonight, Professor, not tomorrow."

Hawthorne uttered a cry of alarm and whirled to run for the exit port. With the callous air of a man swatting a fly, Marlowe whipped a ray-blaster from a shoulder holster and crashed the barrel of the weapon down on the old inventor's head. Without a groan the old man crumpled to the floor.

He was completely unaware of the rocket blasts, the sudden acceleration of the ship—the take-off of the *Neptune* from her cradle as she launched out into the depths of space, flashing into the sunlight from Earth's shadow and heading outward to transit the orbit of Mars.

"What will we do with the old goat?" Reddick asked Marlowe a couple of hours

uneasily: "But what was Hawthorne saying about traveling to Venus only? Where will we get water for power on Mars?"

"We aren't stopping at Mars," advised Marlowe coolly. "We're heading for our secret base on Jupiter. There's plenty of water there in the underground caverns."

"And also a certain amount of atomic fuel," Reddick said, nodding. "We'll need that. We've only got enough in the hoppers of this ship to make a landing."

"So we can now jettison Hawthorne in space," Marlowe said coldly. "He's no longer of any use to us. If this thing works out as it has started, we've got to get those plans of Hawthorne's from that engineer society. We will control interplanetary shipping before we are done."

Electrical Engineer Egan Suddenly Finds That He Can Read Minds—

AND it almost drives him crazy! The curious instrument called the encephalograph, tuned in just like a radio, gives him this strange power—and it leads to amazing adventures in *MAN FROM THE STARS*, an unusual novelet by ROBERT MOORE WILLIAMS.

Coming in the Next Issue



later.

"Nothing at present," decided Marlowe. "We'll first see if his steam engine works. If Adams can't handle it, we'll have to use the old crackpot."

This proved unnecessary. Following the inventor's detailed instructions, the engineer soon generated high-pressure steam in the flash boilers and when he phoned the control room to switch over and conserve the scanty supply of U-235, Reddick made the change smoothly.

And the *Neptune* purred smoothly along, drawing her fire power from the burning rays of the sun, flashing like a jeweled comet as she cut through the blue-black void of space.

"The darn thing works!" exclaimed the astrogator, honestly astonished. Then,

He stirred the inert form of the inventor with his foot. The old man groaned faintly. Contemptuously Marlowe revived him with a swig of Xeno.

Hawthorne came out of it rapidly. He started up and took a swift look through the visiplat at the heavens.

"Where are you heading?" he demanded wildly. "What are you doing?"

"The next stop is Jupiter," informed Marlowe, his eyes glittering mockingly.

"You can't do that!" Hawthorne almost screamed. "Turn back before it is too late! Head toward the sun! Get back to Earth—quick! I told you there were a couple of conditions that—"

"You are too noisy," said Marlowe, pressing the stud of his ray-blaster.

PROFESSOR HAWTHORNE broke off his speech and stared with incredulous astonishment at the seared spot above his stomach. Then he pitched lifelessly forward on his face.

"Call Adams to help you dump the body through the garbage lock," ordered Marlowe to Reddick. "I'll take over the controls for a time."

Six days later, out past the orbit of Mars and heading into the danger zone of the Asteroidal Belt, for some reason the power began to fail. Steam pressure had been going down for twenty-four hours in spite of all Adams could do. Finally, the nozzle jets ceased functioning altogether.

The three outlaws met in the control room for a consultation.

"What the devil has happened to your engines?" demanded the leader angrily of the engineer.

"I don't know," said Adams in perplexity. "But I can't generate enough heat. Driving away from the sun, the prism glasses are collecting less and less sunlight and—and the power is simply

failing."

Reddick began to laugh wildly. He left the controls and lunged at his leader.

"You fool!" he raged. "You killed Hawthorne too soon! That's what he was trying to tell you was the second difficulty about his invention. This ship can only ply close to the Sun. In the outer reaches of space the prisms can't collect enough sunlight to activate the steam engines."

"So maybe I was a bit hasty," said Marlowe, drawing his blaster and waving the hysterical astrogator back. "Get control of yourself, Reddick, or I'll kill you. We'll switch back to atomic fuel and space on to our base."

"How?" demanded Adams, his face stiff with terror and shock. "There isn't enough fuel to do more than land. We're marooned in space unless some stray freighter or patrol ship picks us up. And the chances for that are one in a billion."

Reddick snarled at the suddenly white face of the Space Corsair. Marlowe had outsmarted himself at last.

"Go ahead and blast!" said Reddick.



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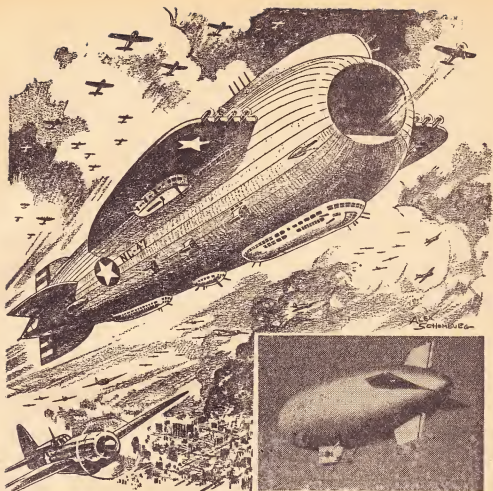
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An artist's conception of American bombers raining destruction on Tokyo from dirigible bases. Inset: American semi-rigid dirigible on submarine patrol

The Sky-Going

AIRCRAFT CARRIER

By SAM MERWIN, JR.

TOMORROW'S "SHANGRI LA"—AIRFIELDS IN THE SKY!

TOKYO, restless since the token bombing by General Doolittle, is quiet in the hour before dawn. Reports have come from the battle fronts that all Chinese "Shangri Las" are occupied or out of action, and the Navy has proved to every Nip's satisfaction that no American carriers are within raiding distance. Roof watchers and air-raid wardens are asleep at their posts.

Suddenly, from out of nowhere; comes flight after flight of bombing

planes. Watchers awake, regard them complacently. When they see that they wear a star and not a circle on their underwings, it is already too late. Tokyo is being bombed again!

Headquarters takes it grimly. Somehow, the Yanks have managed to get through, but these planes can have little gas to reach friendly bases, will surely be shot down or forced down for want of fuel. Damaging though it may be, it is no more than another token raid.

But before the sun is high in the heavens, before the rubble of the first raid has stopped smoking, the bombers are back—this time from a different direction.

Headquarters is no longer calm, for the mysterious planes apparently vanished into the skies after the first raid.

Panic Grips the Flimsy City

The second raid, coming so rapidly on top of the first one, is far more serious. New fires are started, prove too much for an already overworked fire department. Water mains burst, power fails, factories are razed and flimsy wood and paper dwellings burn like the tinder they are.

All available fighter plane protection has long since been despatched in an effort to locate the bases from which the first raid was launched. A few bombers are shot down in flames, but not even Japanese torture can get information from men already dead or unconscious from wounds and burns.

After this second raid, panic grips the great city. Streets and avenues become congested with fleeing sons of the Mikado, making control of fires even more difficult. The smoke of burning Tokyo forms a perfect screen for another low-flying attack.

This attack, headquarters assures the populace, will not come. It can't. No aircraft carriers have been spotted, and the bombers, judging from the few that have been shot down, are not long-range jobs. And there is no such concentration of American medium bombers in China within striking range. It is a freak, they insist, like the Doolittle raid.

Wave on Wave, They Come Roaring

But the instinct of the people proves more correct than the generals' calculations. For, in the late afternoon, American bombers come roaring through the smoke for a third time and from a third direction. And in their wake, Tokyo suffers the greatest destruction that has visited it since the great earthquake and fire of 1923.

Fantastic? Sure it is. But so are the achievements and claims of Henry Kaiser, the wizard producer of the

Boulder Dam and the Grand Coulee, whose shipyards are turning out prefabricated cargo vessels faster than the Germans can build torpedoes to sink them, the man who has promised delivery of 140-ton planes within a year.

So is North American's "Flying Wing," a mechanical pterodactyl if ever there was one. So is Igor Sikorsky's new helicopter, which can hover a few feet off the ground without moving forward or backward.

Where would these planes come from? Why, from the sky, naturally. And there're some things even more fantastic about that than the idea itself. In the first place, we have already successfully built and flown flying carriers. In the second place, only we can build them. And in the third place, we discarded the idea almost a decade ago for no other reason than that a depression-ridden Congress thought it a foolish waste of money.

The Value of Dirigibles

When the great dirigible *Macon* crashed in 1935, it meant the end of the American program in lighter-than-air ships. Preceded by the wrecks of the *Shenandoah* in 1924, and the *Akron* in 1933, other American-built airships, and followed two years later by the explosion of the great German air liner *Hindenburg* at Lakehurst, the disaster put the whole matter of dirigibles on the shelf.

Even the cheap and utilitarian blimp suffered. Two years ago, immediately before the outbreak of war with the Axis, America had exactly one modern blimp. Supplementing it were a few obsolete World War One models, two discarded Army non-rigids and two used Goodyear Trainers. In fact, the Goodyear Rubber Company itself had more blimps than our armed services.

An analysis of the various dirigible disasters reveals that in themselves these misfortunes should not have affected the continuance of a balloon program, especially in the light of subsequent world events. For the value of dirigibles in war has been proved again and again.

In 1918, the Allies feared the Zeppelins, and rightly so, far more than

they feared Fokker fighter or Rumpier bomber planes. Great fleets of the German airships had bombed London and Paris almost from the start of the first World War. They covered incredible distances for those days, stayed aloft for amazing lengths of time, survived all sorts of weather and plane opposition.

Dreadnaught of the Air

The Zeppelin was, in effect, the dreadnaught of the air. With it, supplies were flown from Fredericks-hafen to hard-pressed German forces in East Africa, prolonging the war in the Dark Continent until 1917. It was, perhaps, the greatest all-German single weapon of the conflict.

And even those primitive gas bags were hard to shoot down. More than once, Zeppelins got safely back to their bases with thousands of bullet and shell holes in them and one-third of their hydrogen lost—and this despite the fact that hydrogen itself is one of the most explosive of elements. They had an amazing "lift" that left attacking planes far below them, and they mounted many guns on steady platforms.

At the time of the Armistice, Germany had just completed a super-Zeppelin designed for the express purpose of bombing New York. Billy Mitchell knew about it, was fully aware of the value of lighter-than-air craft as a weapon real and potential, and decided to get it for America.

A Great American Dreamer

He found some money lying around loose, secretly assembled and trained an airship crew.

His idea was to take them to Germany, buy the big ship and fly it back to this country. But before he could get under way, the French grabbed the prize, renamed it the *Dixmude* and proceeded to bring it down in the middle of the Mediterranean a few years later.

But Mitchell, determined that America should take the lead in airships, didn't give up. Largely at his insistence, a clause was written into the peace treaty compelling the Germans to build us the (at that time)

biggest dirigible ever constructed.

At the same time, contracts were let out for Goodyear to build the *Shenandoah*, our first big rigid airship.

The *Shenandoah*, as every one knows, was split in two by an Ohio cyclone and wrecked with the loss of its commander, Zachary Landsdowne, and most of the crew. But among the survivors was Lieutenant Commander Charles Emery Rosendahl, and he took over and carried on with the work.

The Germans completed their airship, the *ZR-2*, and it was flown to America, where it performed invaluable service as the *Los Angeles*. It was finally, thanks to a peace-minded government, dismantled at Lakehurst in 1929.

Meanwhile, the United States Navy was going ahead on its own. They had Goodyear build the *Akron* and the *Macon*—ships more than twice the size of the *Los Angeles*. And each of these mighty dirigibles carried two planes.

Lessons from Disasters

A simple launching device was installed as well as a hook that enabled the planes to return to their air-borne hangars when their flights were completed. More than 3,000 launching and mid-air hookups were performed aboard these two aerial giants.

Both of these ships crashed under storm conditions which, putting unexpected stress on the great gas bags, caused their light framework to buckle. But out of each of these disasters, lessons were learned which obviate the recurrence of any similar catastrophes in airships of the future.

More important, neither of them caught fire. For they were filled with non-inflammable helium, of which only America has sufficient deposits for any airship program.

Where Germany has had to forfeit all of its vast experience and "know-how" in dirigible building and flying because it has almost none of this precious element, it is reliably estimated that about 1,000,000 cubic feet of helium a day is wasted with our natural gas deposits. We have literally helium to burn—except that it won't burn.

A Weapon Strictly American

Since the dreadful lesson of the *Hindenburg*, last of the German dirigibles, which burned at Lakehurst because of static electricity, it is plainly evident that shortage of helium, and that alone, has kept Adolf Hitler from constructing Zeppelins that could carry his blitz further in both distance and frightfulness than the *Luftwaffe* has been able to do.

Thus the dirigible, if it is to be used at all in this war, will be an American weapon. Six airships capable of carrying bombers will, according to Commander Rosendahl, who has been tragically reassigned to sea duty for the fourth time, although he is the world's greatest living balloon man, cost approximately as much as one of the eighty cruisers we are now building.

"They can travel twice as fast as a destroyer—eighty-plus miles an hour," he says, "and six of them can mother as many planes as one surface carrier. They use fewer strategic materials than anything else that flies or floats. Cotton cloth constitutes the bulk of an airship. A dirigible carries a smaller crew than a destroyer, can cruise for a week without refueling."

Imagine the effect of a raid of bombers launched from air bases on Berlin or Vienna as well as Tokyo. In the first place, since they would not have to go more than a few hundred miles at most, the planes themselves could sacrifice fuel for bomb loads.

From Nowhere and Return

They could strike from nowhere and return to nowhere, leaving ruin in their wake. They could reload and return again and again from a base that was always in motion far above the earth.

If a dirigible were shot down, planes could return to another one, some of whose bombers were missing. It would be a savage and indescribably effective blow at the heart of the Axis.

The scoffers, of course, never fail

to bring up the matter of dirigible vulnerability. The answer to this is, "So what?"

Aircraft carriers at sea have already proved themselves tragically vulnerable to all sorts of attack, and sufficient dirigibles to carry four to six times as many planes as the largest sea-borne carrier could be built for the same cost in a fraction of the time and would offer a vastly more dispersed and elusive target.

Then, too, the dirigible is not as vulnerable as scoffers pretend. In the first place, the defenders have got to find it. It can operate as a mother ship a hundred or more miles from the target in any direction, can lurk above cloud banks, using a cable-drawn observation car at intervals if astral navigation proves insufficient, and can keep constantly on the move.

A Deadly Weapon—Our Own!

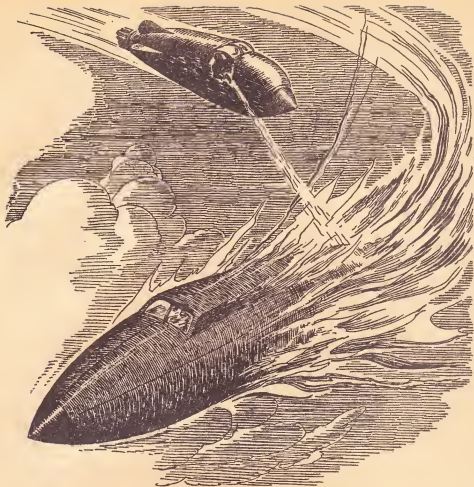
It still has the defensive possibility it had in the last war—the ability to rise vertically and move swiftly than any interceptor, and a steady platform for Bofors or anti-aircraft machine-guns. To these is added not only the strength of non-inflammable helium, but the protection of its own fighter planes. If Flying Fortresses can shoot their way through plane attacks, why not dirigibles?

In quantity, such airships would be unanswerable—if our ground and plane-minded leaders can see the light. There is, of course, a distinct possibility that they already have. The need for the blimp, which has proved an invaluable anti-submarine and convoy protection instrument, was recognized in 1940 when Congress appropriated money for forty-eight of the hardy non-rigid ships, most of which are already in service.

This appropriation, however, was followed by the passage of a bill to construct 200 lighter-than-air craft—and provisions for dirigibles were at last included! America may well be on the way to employing this deadly weapon it alone can operate.

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Chain explosions ran the length of the ship

VISITING YOKEL

By CLEVE CARTMILL

The Private Feud Between Sergeant McBriar and Captain Kennedy of "The Finest" Halted an Earth Invasion—But They Didn't Know It!

SERGEANT RION McBRIAR barked his order.

"Pull over to that pylon!"

The sergeant's voice was loud and harsh with effort to hide his fear. Not fear of the pilot of that peculiar looking craft, but of Captain Kennedy. If McBriar allowed the Peace Parade to be messed up, Kennedy would certainly send him back to the sticks. McBriar hoped

no official eyes were on this incident.

The pilot turned his helmeted head, gave McBriar a penetrating look, and obeyed the pointing finger. He swung the blunt snout of his flyer toward the spidery pylon, picked up McBriar's thought impulses and cursed himself as he stalled his ship beside the high, bright tower.

"Norg," he thought, "you have been

stupid. This being is a petty official. You have broken a rule, carelessly, and may be exposed."

Norg considered striking McBriar dead, then discarded the thought. The inhabitants of this planet had no such weapon as his, and they must have no knowledge of it until too late. He waited, faintly amused at the fuming thoughts that swirled in McBriar's middle-aged head.

"Where did you learn to fly?" McBriar demanded wrathfully. He brought his traffic car to the side of the long, dull craft and eyed the pilot with steady contempt. "You may fly that way in the country, cousin, but you're in the city now. Didn't you see the warning?"

Norg glanced at his panel instrument that broke these alien sounds down into thought patterns, picked up the anticipated reply from McBriar's thoughts, and made appropriate sounds of his own:

"I am sor-ry."

A tiny flicker of suspicion rippled across McBriar's thoughts, brought a calculating gleam to his gray eyes and a wrinkle to his brow.

HE THOUGHT: funny talking guy. Funny looking, too. Never saw eyes like them. What's that helmet? Maybe—Oh, lord, maybe he's some big bug that's got a right here. But why didn't they tell me?

"What're you doing here?" McBriar demanded with subdued belligerence. "Look!"

He waved at motionless traffic, hundreds of passenger craft at the local level, big freighters above them, and at two majestic liners, small and high.

"They stopped, see? And I don't care who you are, you should've, too. The parade's coming."

Norg read thoughts, picked up the expected answer.

"I did not know of a pa-rade. I am sor-ry."

McBriar gave him a blank look of astonishment.

"Where you been, anyway? Everybody knows there's a Peace Parade every year. This is it, chum."

"I am sor-ry," Norg repeated.

"You talk funny," McBriar said in a worried voice. "Look, maybe you got a right here, and if so, I apologize. But you better let me see your—" He broke off as he caught movement far off. "Oh—oh! Here it comes. Stay where you are till I get back."

McBriar tilted his drive prism, swooped up on a long curve to official level, and brought his bright red craft to attention. To his right and left, other red traffic ships were regularly spaced, facing replicas of themselves across the parade channel. Below them and above, traffic was still.

Sergeant Rion McBriar paid little or no attention to the scene. He was no more consciously aware of familiar objects than that he was breathing. He had seen it so often, the individual ships, the shining roofs of the greatest city in the world, the sprinkle of pedestrians on crosswalks.

His strange encounter was in his mind, obscuring the oncoming parade. His thoughts drowned out ceremonial speeches from the leading ship. He had heard it all before—the history of this day and the pact it celebrated. He thought of the helmeted pilot and the peculiar craft that had moved when others stopped.

Not that the ship was really so strange, he thought. Everyone, these days, colored his flyer or equipped it with gadgets. Individuality was the watchword. But there was a *feel* to the ship. That was it, McBriar said to himself. It felt different. And the pilot, too. That funny looking helmet, the hesitating speech.

Just my luck, he thought, if the guy is an experimenter. If he's in with the big boys, I'll catch a little hell. Anyway, nothing happened, really. Nobody saw it—I hope.

The hope was thin, dying even as it formed. For bad luck had dogged his career and fended off even a sergeantcy until recently. McBriar remembered with some bitterness how younger men passed over him to higher offices, and how his contemporaries had become commissioners. All because of the breaks.

Somebody was a cinch to have seen the incident. Of course, it had to occur in his sector. Perverse fate saw to that. It couldn't have happened to one of the other boys, oh, no! They were all young men, headed for cushy jobs. No, it came straight to McBriar, and slight though the disturbance had been it would wind up as a notation on his record.

The parade began to pass. McBriar's eyes, filmed with gloom, were hardly aware of the glittering line of ships. Only his subconscious registered the event and recorded the pompous speeches. His conscious mind turned inward to himself.

SUDDENLY he stiffened, jerked his gaze to one side where a flash of movement marred the immobile symmetry of civilian traffic. His hand shot out to his controls, but froze midway. Nothing was important enough to pull him out of position, not even that strange ship which now streaked across the front of the parade and disappeared.

McBriar cursed. He'd lose his sergeant's star now. That was certain. Not only had his brother officers observed this flagrant breach of traffic rules and noted that it had occurred in McBriar's sector, but all the high and mighty officials on earth were in that front ship.

McBriar could picture their scandalized expressions as the peculiar craft cut across their bow, could hear the crackling messages which must even now be burning the ears of Captain Kennedy.

McBriar was stunned with despair. He would face Kennedy for this. And painful as that incident was sure to be, it was certain to be pleasant compared to the ordeal of facing his wife and kids later.

Myrna wouldn't bawl him out, no. That was the devil of it. She'd comfort him, and try to build up his ego. But then she'd go off by herself and cry. And the kids would be casually contemptuous of his loss.

"What's an old star?" they'd say. "We like the country. So what are we waiting for?"

And he'd reply in kind, wisecracking while packing to go back to the sticks, and with the heart of him breaking inside.

"If I ever catch that guy—" McBriar said aloud through stiff lips. His mind took it up, made pictures of satisfying tortures.

He'd just finished knocking the guy's helmet off with his own bloody leg when the signal came through for traffic to move again.

Hard on the signal came a voice, rasping from his monitor.

"McBriar! Wake up! And get down here. I want to talk to you!" The sergeant went, unhappily. . . .

After his meeting with McBriar, Norg had watched the little red car pull away and assume position. With one swift comprehensive glance he sized up the motionless panorama, the formal waiting. When the parade came, all the inhabitants in this locality would remain where they were. Should he go or stay?

He had felt the uneasy suspicions of the petty official who had stopped him. That one would be back to investigate. Close investigation would not necessarily bring the truth to light, but it would force him to action which might prove disastrous.

Dangers here were manifold, but not to his person. If by some fluke these—what did they call their planet, Earth?—these Earthmen should learn that he was different and so pursue him, Norg's own fate would be sealed. He could elude them, he could destroy some of them, but they would know.

In that knowledge lay disaster for his own people who waited for his report far out in space. Norg had learned many things since his scout ship had entered this planet's atmosphere, and chief among these was that the inhabitants of this planet were intelligent.

Weak, yes, and ill-prepared to resist an attack. But even so, though their intelligence was rudimentary compared to his own, they were keen enough to use sheer force of numbers to advantage.

Therein lay his own people's weakness—they were few in number. Only by complete surprise could they wipe out this Earth race and appropriate the planet. If one Earthman suspected that Norg were alien, that suspicion would generate

a certain amount of uneasy alertness which might prove troublesome.

That official, for example, would return to complete his examination when the parade had passed. He was afraid of losing some bauble, apparently a symbol of his position. Though Norg could not understand such childish fear, he knew that it was important to the petty official. He knew that the official would prosecute his inquiry with dogged persistence and that exposure might well follow.

On the other hand, if he went away from here, a search would be instigated. His scout ship was distinctive enough to give direction to the search, and eventually someone would spot him and raise the authorities.

NORG made his decision. As long as he was a fugitive, these creatures would not *know*, would not be frightened into action that might harm the invasion attempt. Furthermore, he had spent some time—enough time, perhaps—in this greatest of their cities, and knew what he needed to know about this race. Before reporting to his flagship, he had yet to estimate the fruitfulness of the land.

He would go, then, to the rural spaces where eyes were few and danger minimized. If his report on the people themselves was sketchy, it should be counterbalanced by over-elaborate data on the planet itself.

He acted at once, swooping across the front of the parade. He caught a welter of horrified and angry thoughts from the flagship as he cut across her bow. Caught, too, thoughts of helpless rage. None could pursue, the pattern of the parade could not be broken.

A thought of exultation exploded along his brain. He was safe, then, for a time. He didn't need much time. This was perfectly obvious as endless green fields rolled backward under him. There was a rich fatness in them, unlike the barren, dead spaces of other planets he had scouted.

Here was home for the homeless who had been forced out of their own by a

rogue star.

He remembered the bright destruction of that far planet on which he had been born; remembered the grim despair which laid a curtain of thought around that vast caravan; remembered the search through stellar systems, the rising hopes when a new planet was sighted, the disappointments after exploration.

This was home. He felt it, knew it. No poisonous atmosphere, no killing gravity, no inedible staples. There it lay below him, fat with life, rolling with green beauty, thrusting upward in the distance stark hills which collected water in their season.

He dropped down in the vicinity of a small community. He could take samples here, and continue his observations of such inhabitants as were available. Then off to his own people, report; make a swift surprise attack, wipe out this race, every member of it, and—

At long last, home. . . .

Sergeant Rion McBriar was uneasy. He wanted to twist his hands, but resisted the loss of dignity this would entail.

He twisted them, however, in his mind as he waited for Captain Kennedy to open the interview.

He leaned forward on the edge of his chair as his superior went leisurely through a sheaf of official reports. He could see only the top of Kennedy's head, but the silver sheen seemed baleful to McBriar, as he knew the frosty blue eyes would be when they met his.

They did, and they were. The voice, however, was dulcet, seemingly sympathetic. The tone indicated that Captain Kennedy's sole concern was the happiness, comfort, and general well-being of Sergeant McBriar.

"Well, Sergeant," Kennedy purred, "I trust you are well?"

McBriar stiffened inside. He thought: so he's going to draw it out, cat and mouse.

"Yes, sir," he said formally, "I am well."

"And the little woman, Sergeant? She is well? And the children? Boys, I believe? Ah, yes, strong lads both."

McBRIAR couldn't keep a small glow from his eyes, but his voice was impersonal.

"We are all well, sir."

"Good!" Kennedy said heartily. "You know, Sergeant, many members of the force seem to feel that I place efficiency above human relations. Isn't that true?"

"I don't know, Captain," McBriar said evenly. "I haven't heard any talk. My duties keep me too busy to listen to gossip." A good thing, the sergeant thought, the guy can't read my mind.

"Of course," Kennedy said, "you are busy. But I'm sure that you are as aware as I of my reputation. I have here"—he tapped the sheaf of reports—"some interesting data concerning efficiency. It concerns you, Sergeant. In fact, it is a long record of incidents which eloquently reflect your efficiency. Now there are many who say that I would allow these reports to influence my personal relations with you. No?"

McBriar's jaw hardened. "I don't know what you're getting at, Captain."

"Ah? For example, during your probationary period, your zeal drove you to reprimanding an Experimenter before you discovered his mission and identity. You may remember."

McBriar remembered. That was the first of a series of bad breaks. The man had been surly in response to routine questions, and McBriar had reacted as any officer should.

He said nothing. He waited for Kennedy to go on.

"And here is another, Sergeant. The Baltar robbery. You may remember the results of your investigation."

McBriar winced. He had acted on what he believed to be a bona fide tip. How was he to know it was a gag? He had gone ahead in pursuance of duty and arrested Captain Kennedy's brother-in-law. He remembered the explosions.

"There are others, Sergeant," Kennedy continued, riffling pages. "But why rub salt in your wounds? Let's get down to today's incident."

McBriar decided suddenly that he had had enough. After all, a man had his pride. He couldn't remain indefinitely

before another in the attitude of a small boy caught stealing sweets.

"If you're going to break me, Captain, get at it. I don't have to take this sort of thing from you or anybody else."

Captain Kennedy showed a faint cold amusement. He touched a stud on his desk.

"I have stopped the recorder, Sergeant. What I am about to say constitutes language unbecoming to an officer, and I have no wish for it to be on official records. I want you to know exactly what I think of you."

McBriar said, "Take it easy, Kennedy. I've been wanting to give you a beating for a long time."

Kennedy got to his large feet. His wide shoulders were hunched, arms half bent, hands forming huge fists. His face held not even the false friendliness of a few moments before.

"If rules and regulations did not require a trial, I would kick you off the force, McBriar. But the evidence indicates that you were not wholly at fault. Now I know that evidence doesn't even hint at the truth that you are the most miserable excuse for an officer I have seen in fifty years on this desk.

"You have no imagination, and what little brain you possess has become atrophied from disuse. You have only a habit pattern. You move straight ahead, blindly, doggedly, a mindless force which can adapt itself to no changing condition, however slight. The simplest robot reflects more credit on the human race than you, for it indicates that its makers have imagination and ability.

"You are merely evidence of a deplorable blunder on the part of Nature. Whatever natural selection went into the process of bringing you to a contemptible manhood, belongs to dark, lost ages."

McBriar was held motionless by shock and surprise. One man did not speak to another in this fashion. Controlled, and all the more vicious, contempt dripped from Kennedy's slow words. They cut more deeply than the most vivid invective, were more shameful than public insult, more arousing than a slap in the face.

He too, got to his feet as rage surged through him in adrenalin waves. His eyes glazed slightly. He stepped forward and threw a right jab at the mocking face. What happened in the next few minutes was never very clear to him.

THE sergeant came back to consciousness with only a hazy recollection of events. He noted the overturned furniture, scattered papers, the litter of office supplies all over the floor, and reconstructed the fight to some extent. Then he got to his feet and saw with surprise that Captain Kennedy was affable behind his desk again. Not a single ruffled silver hair, not a mark indicated that Kennedy had even exerted himself. His knuckles were over-red, but that was all.

His voice was pleasant enough, too, with its mocking overtones.

"Thank you, Sergeant, for the workout. I've been neglecting my exercise recently. I'm going to cut in the recorder again. Let me see, I believe your last remark was that you didn't have to take that from me or anybody else. Please sit down again before we resume."

McBriar was tired. He ached. He sat. He waited. Kennedy touched the recording stud again, waited a second, then said in shucked tones:

"Break you, Sergeant? Ah, no. Experienced officers are not so plentiful that I can dispense with one whose only fault is an—ah, affinity for bad luck. But before I give you another assignment, I want details on the incident at the parade. Who was it?"

"I—I don't know," McBriar muttered.

Kennedy's eyes widened. "You—don't—*know*? You can't mean that, Sergeant. It isn't possible that you don't know."

"I was about to look at his identification," McBriar said desperately, "when the parade came into sight. I told him to wait, and took my position. That was more important. So he took off when the parade came abreast."

"I see. Well, no matter. We can find his name easily enough. What was the type and number of his plane?"

"I—uh—"

McBriar fell silent before the look of

horror which overspread Captain Kennedy's features.

"Yes?" Kennedy whispered. "Yes?"

"I guess it didn't have a number, Captain."

"You—guess? Did you say *guess*, Sergeant?"

"I mean it didn't have a number. It was a kind of funny ship. Queer, somehow."

Kennedy continued to whisper, words falling softly from a tight mouth below icy eyes.

"It didn't have a number, and you let it get away? Is that—*can it be*—true, Sergeant?"

"Now listen, Captain," McBriar said earnestly. "I couldn't do anything else. Here's what happened, exactly."

He related the incident from its beginning, while Captain Kennedy listened. And as he listened, the captain tapped the top of his desk slowly with one finger tip. When McBriar had finished, he continued to tap the desk for a long time.

Then, "Give a description of this plane, Sergeant."

"Well, it's—uh, that is, I can't exactly, Captain."

"Then give a partial description of it, you idiot!" roared Kennedy. "Give us something we can pass on to the men. They must know something about it before they can find it."

Sergeant McBriar was unhappy. He dropped his good eye to the floor. He really twisted his hands.

"I can't, Captain," he said miserably. "It was just—queer. It had a funny—uh, *feel*. It didn't feel like other ships."

"You touched it, Sergeant, and don't know any more than that?"

"Well, no, I didn't touch it, Captain. You could feel it by just looking."

CAPTAIN KENNEDY'S jaw dropped. He didn't say anything for a long time. Then his speech came sadly, gently.

"You married a fine woman, Sergeant. It isn't her fault that you are as you are, and she shouldn't suffer. I should be perfectly justified if I chose to strip you of all insignia and reduce you to your mis-

begotten normal.

"But I'm soft hearted, Sergeant. I treat my men as human beings. I have consideration for their families. So I am not going to break you, Sergeant, even though your action today—or lack of it—reflected discredit on the department and caused me—me, Sergeant!—to receive severe reprimands from the international council. I am going to send you to a post befitting your peculiar talents."

Kennedy paused, and to McBriar's uneasy eye he was licking his chops, savoring what was to come.

"Your duties will not be onerous, Sergeant. But even so, you will report to me personally before you so much as give a citizen directions to the post office. I am giving you another chance, and I am going to make sure that you make good." Kennedy paused again, and smiled. It was not a pretty smile, McBriar reflected—it was all teeth. "In Rayville," Kennedy said.

On the third day, Sergeant McBriar began to enjoy his work. True, he had little to do that was worthy of mention, for the community was given over to the serious business of developing agricultural products. But he mentioned every move he made, short of breathing, to Captain Kennedy. He managed to interrupt Kennedy at least a dozen times each day, and at least once in the dead of each night when coyotes came down from the hills and howled outside the poultry station.

Pursuing his theory that eventually Captain Kennedy's choler would overwhelm him—and perhaps bring on heart failure—he brought minor events to the attention of his superior at 10 o'clock of the third morning, at the time the captain was wont to slip out for a mid-morning coffee and cigarette.

If Captain Kennedy was annoyed, or even beginning to crack up, he kept all hint of it from the image which appeared on McBriar's panel screen.

"Ah, Sergeant," he said pleasantly, "what world-shakers have we this morning?"

"Sergeant Rion McBriar reporting from Rayville, sir," McBriar intoned. "At eight-thirty-two this morning, three boys

allowed their model rocket ship to get out of control. Result: it crashed against the pyro-plex front of Mrs. Archer's sun porch and seared the pane so that it is completely opaque."

Captain Kennedy pursed his lips.

"Hmm. Now don't lose your head, Sergeant. Keep calm, man. You've handled things as big as this before. Remember the time the man asked you what to do with a dead cat. Keep that in mind, believe that you are equal to this emergency, and you'll be all right. Do you have any suggestions?"

"Yes, sir," Sergeant McBriar said smartly. "I know the identity of the culprits, and—"

"Good work, man, good work!" Captain Kennedy interrupted. "We'll have you using your head yet. Go on!"

"—and I thought their parents should replace the pane, sir."

"Exactly, Sergeant. Anything else?"

Sergeant McBriar winced at the patronizing tones. He didn't like being treated as a small boy. However, it was in a good cause—his purpose being to drive Captain Kennedy to madness—and he simulated a flush of pleasure.

BESIDES, he thought, and the thought brought a real flush of pleasure, he had a lulu for the captain this morning.

"Yes, sir." Sergeant McBriar kept excitement out of his voice. "Another of the plant episodes."

"Sergeant, you do have your troubles. So somebody pulled up a couple of petunias again, eh?"

"No, sir, it was potatoes."

"I was using petunias symbolically, Sergeant." Captain Kennedy's tone sharpened a trifle, and McBriar glowed again.

"Sorry, sir," he said.

"So it was potatoes. Have you any further news of this night marauder?"

"No, sir, except that he's been seen. That is, his ship has been seen."

"Ah? What kind is it?"

"Why, uh, it's a funny kind. I didn't get a very good description. It's—uh, apparently like the one that cut across the Peace Parade, maybe the same one."

Captain Kennedy's blue eyes sharpened in the screen. He became a trifle avid.

"Where is he?" he snapped.

"Why, I don't know, sir," McBriar said blandly. "It's out of my sector. I'm confined to the limits of Rayville."

"Never mind that!" Kennedy barked. "Go find him."

Sergeant McBriar quoted the rules with a fat satisfaction.

"Section four oh two, subsection twenty-six A, article sixteen, paragraph four, of the Official Code, sir, says, 'No officer of the law may leave his post, if such departure renders that post liable to unregulated movement.' I'll have to be relieved, Captain, if I go after him."

"You'll do what I say, you nitwit! Rayville could get along forever without supervision."

"I'm following orders," McBriar said stubbornly. "Those orders are part of the official record made in your office. I stand on my rights."

"You'll stand on your ear," Kennedy fumed, "if I have to come out there. Remember that. Get—after—that—man! I want him!"

Captain Kennedy cut the circuit. Sergeant McBriar grinned, waited ten seconds, called it again, and presently Kennedy's red face filled the little screen.

"There's one more thing, sir," he said apologetically. "I hope I didn't interrupt you again?"

Kennedy's jaw set. His eyes reddened. He said nothing.

"There was a death last night, sir."

"Well?" Kennedy grated, "what do you want me to do—handsprings? Natural deaths don't concern you."

"But this wasn't natural, sir. He was killed."

"Killed? How?"

"Apparently by the same person who's been stealing potatoes, and corn, and what not. How, sir? Nobody knows."

* * *

The time had come to go, Norg decided. His soil analyzers had shown this planet to be similar to his own before it had exploded. He had eaten this planet's food and detected no bad effects. Now was the time to go, report to his people, and lead

them in lightning attack.

The effect of his weapon on the native last night was disconcerting. The being had simply fallen dead, with none of the pyrotechnic displays which normally accompanied use of his device. These beings were more rugged than his own people. But, he consoled himself, they died.

They could die en masse, as well as singly.

But now he must go, and he must drift into noonday traffic as if he were one of them. He must not repeat his earlier mistake of violating their idiotic laws. He must become one of the herd until he was away from the nearby settlement. Then he could zoom off into space. . . .

MCBRIAR said, "You got here quick."

Captain Kennedy was in no mood for chit-chat.

"Where's your ship?" To the youth in corporal's green, "You stay here, Beeks." To McBriar, sharply, "Where's your ship, man?"

"On the roof, Captain."

"Well? Get moving!"

When they were in the little red plane, Captain Kennedy gave crisp orders.

"We'll comb those hills till we find him. I want to get my hands on him for about fifteen minutes. After that we'll question him."

"But the rules—"

"The devil with the rules! He created a disturbance in a Peace Parade. Do you know what that has meant to me? No, you wouldn't. Never will. You're about as likely to become a captain as I am a monkey's grandmother. Well, what's funny about that?"

"Nothing, nothing," McBriar said hastily. "But look, Captain, if you're holding this guy to blame, then why do I take the rap? Why send me out here?"

"Shut up!" Kennedy snapped. "I'll ask the questions. Get going!"

Sergeant McBriar reached for the controls, scanned the sky overhead, and froze.

"L—look!" he gabbled. "It's him!"

"Stop all traffic!"

McBriar touched the stud which lighted a warning signal on all panels, and launched the little ship toward the quarry. That one came to a stop sluggishly, McBriar noted, but stopped nonetheless. He pulled alongside, hoping that the man was an Experimenter, and that Captain Kennedy would lose his stripe for interference.

"Pull over to that pylon!" he ordered.

The pilot apparently started to obey, then fled. Captain Kennedy pulled his gun.

"Aw, Captain!" McBriar protested. "My gosh, not that!" He cited another rule. "The Official Code says no emergency justifies taking a human life. You know what'll happen, Captain, if you kill him."

Captain Kennedy lowered his arm. "Catch him, then! You fool, get going!"

Sergeant McBriar set the ship into motion at top speed, but the strange craft pulled away faster and faster.

Captain Kennedy sighted again. McBriar laid a hand on his arm.

Captain Kennedy jerked away from McBriar's restraining fingers.

"You fool, I'm only going to disable his ailerons. You attend to holding the ship steady!"

Kennedy aimed, depressed the activator.

What happened then was awesome, spectacular, and satisfying to McBriar. First, the tail end of the ship exploded. This seemed to set off a chain explosion which progressed swiftly, but not faster than the eye could follow, along the length of the ship and sent brilliant bits of passenger and ship plunging to the ground. McBriar followed more leisurely.

During the descent, Kennedy muttered over and over:

"It's impossible! It can't happen!"

"Then they can't break you, Captain," McBriar said cheerfully. "If it's impossible, they can't take your uniform away from you. The chairman of the international council can't have you on the carpet for it. They can't leave your office vacant for the oldest sergeant on the force."

"Listen, McBriar," Captain Kennedy said, "I don't imagine anybody else saw

me shoot. Suppose we don't mention it, eh?"

"Why, Captain! You shock me. I am a sworn officer. Truth and honesty, that's me. My conscience wouldn't let me twist the truth."

"You won't lose by it," Kennedy promised.

THEY landed, then, among the litter in an open field. Presently other ships collected, but McBriar waved them away.

They examined the residue, and saw that no explanation could be reconstructed from the charred bits of matter and a half dozen scorched potatoes. Captain Kennedy then sat on a rock and stared into space. McBriar called in for chemists and photographers, and joined his superior.

"I still don't understand it," Kennedy muttered. He looked up at McBriar. "Oh, nuts, I suppose I've got this coming from you. I've stopped you from going up in the service, the same as I've held back everyone else. I was proud of my job, and wanted to keep it. Lord knows, though, what my wife will say. She'll be glad, I guess. We can visit her mother now," he added, grimacing. Then he shrugged.

"Well, I might as well face it. I pulled a boner. I'll pay for it."

McBriar thought: "Why, the guy's human, after all."

"Uh, look, Captain," he said. "I guess I wouldn't do anybody any good by testifying that you killed the guy. I'm not glad you did, exactly, even if he did cause me trouble. But if it had to be somebody, I'm glad it was him. He won't get me demoted again. So I'll say it looked like internal combustion."

Kennedy stood up, extended his hand.

"Sergeant, you'll never regret this," he said brokenly.

McBriar waved away the hand.

"Don't get me wrong. I still hate your face. And if I do this for you, I want one favor."

"Name it, McBriar!"

"It's not a promotion," McBriar said. "I'll take that if I earn it, and not as a

bribe. But you *can* bribe me. Remember that beating you gave me?

"I'm sorry about that, Sergeant."

"Well, I'm not. I'm sore. So here's what I want. You're a little bigger than I am, and maybe better with your fists. I never went in for fighting. So you can still whip me, I guess. All right, here's what I want. Drop your hands, and let me take the first sock."

Kennedy stared. "You think I'm mad?"

"What I think is beside the point. Look, Captain. Nothing like this ever happened before. If the truth goes in, you'll be busted for killing an Experimenter. That's what he must have been, because a ray gun won't do that to ordinary stuff. That ship was some new kind of material.

"But if I say it was internal combustion, the big shots will just be sorry, but not sore enough to kick you off the force. I'll say it, but I want one good sock. Drop your hands!"

Captain Kennedy's jaw set. He dropped his hands.

"All right, McBriar," he grated. "I'll remember this."

SERGEANT RION McBRIAR grinned. "So will I, believe me!"

He swung. His fist landed with a satisfying crack on Kennedy's jaw. His superior did a satisfying loop in the air. But, to McBriar's amazement, the captain bounded to his feet and before McBriar could defend himself took a swing of his own.

The blackness paled. Kennedy was helping McBriar to his feet.

"You dumb Irishman," Kennedy said with a grin. "Nothing was said about me returning a sock."

McBriar shook his head, glared, then grinned.

"No," he admitted, "nothing was said. Ain't I a dope?"

He stuck out his hand. Kennedy took it.

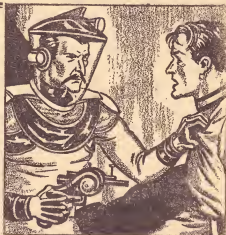
Murder on Callisto!

IT started out like a simple case of homicide. That was bad enough in itself, because it was the first murder during the five years Rod Caquer had been Lieutenant of Police in Sector Three. Sector Three was proud of that record.

BUT before the thing was over, nobody would have been happier than Rod if it had **STAYED** a simple case of murder. Without cosmic repercussions! The victim had been shot with a gun—an old-fashioned gun of the type outlawed and unknown in Callisto!

YOU'LL be amazed at the way Rod Caquer solves this baffling mystery of the future in **DAYMARE**, a complete novel by Fredric Brown that will hold you spellbound!

Coming in the Next Issue!





A Department Conducted by SERGEANT SATURN

CHECK the air valves and the ventilators, gang; we're taking off for our routine flight in this gas chamber, and the old Sarge doesn't want to run the risk of being asphyxiated. What are you little sun imps doing these days? Merrily clipping coupons from Ration Book Number Two? If so, you can get more meat than by clipping the old Sarge alongside the head.

But if it's red meat you want, and alive and on the hoof, then the old space dog is your mutton. Having just received a fresh shipment of Xeno varnish remover and high-glow coat enamel, if you'll just wait until I refill my snuff box with powdered aspirin, I'll square off and have a go at knocking you junior astrogators into shape for the ensuing cruise.

Take your stations now and look alive while we seal the exit ports and prepare to blast off. Okay. The all-clear signal is blinking. So we'll start spacing this voyage with a brief snort of the starboard rocket bank from a spot south of the Border.

APRIL SHOWERS

By Harry Tawil

Dear Sarge: Just got through with the April issue of T.W.S. The cover is just plain no good. As for the stories, here is how they rate with me:

1. Pawns of Chaos. Good.
2. The Conquest of Venus. Good.
3. Lotus Juice. Fair.
4. The Heavy Man. Fair.
5. The Invincible Wrestler. Poor.

And now listen, you old rascal, if you don't print this letter I will . . . (I'd better not write it for it may burn the paper) even if I have to hike it to N. Y. to do it.—*Bayoneta 14, S. Pedro de los Pinos, Mexico, D. F.*

You don't give the old Sarge much to work on, Kiwi Tawil, do you? Your ears are so short I can barely reach 'em. Not at all like taking a rabbit out of a hutch. So you didn't think there was anything at all dramatic about a human hand upfing to represent a man being overwhelmed by a mob of Venusian plug-uglies, local union number 1313, eh? But you like the story, so that gives you only one demerit.

After one glance at the first paragraph of the next communique something tells me that one pee-lot must have started studying the international language with Kiwi Conrad Fisher. Learning Ro so you can row with the old space dog, eh?

ROSES AND TAILS

By W. S. Burgeson

Dear Sarge: Greetings! My pachydermatous perpetrator of valetudinarian witticisms! How's

everything on the good ship TWS?

I'm feeling Rotto, and would like to be biotto! So pass the Xeno jug, mine host, ere I succumb to a severe case of Venusian snakebite.

Get a firm grip on your mail-order grub mashers and belly up to the consultation table, dear Irish (?) non-com, and bend an attentive ear in this direction.

We are about to blast-off for The Twin Worlds of Praise and Pocey! On this gala voyage we shall inspect The Talented (?) crew of The good ship TWS! We'll pin Roses on The Masters and Tails on The literary Jackasses!

So seal the hatches and let's go! First of all, naturally, The Cover: Pin a rose on Mr. Betsy! That's a super-subsanctuous job of daubin' delectable tints if ever I've seen one! No green monsters, either! The lad with the brush wasn't lush when he threw that on canvas.

Next, on the visiscreen, I glue an appreciative (tho' bloodshot) eye on Nelson S. Bond's "Pawns of Chaos." For that solid concoction of eye-openin' adventures; give Mr. B. Three Roses. In fact, give him Four Roses!

As the scanner centers on M'sieu Millard's "Conquest of Venus," I raise my anemic hands and applaud vigorously! (After which I amble out for another blood transfusion.) You may pin a rose on Mr. M. any time now, Sergeant!

Gad! What's this? Perchance my weary old eyes are failing me. Could it be that TWS would stoop to printing such tripe as "Lotus Juice"? Yes! I fear 'tis the horrible truth. You will be allowed ten seconds, Sarge, to pin a tail on the—donkey! Mr. Jameson is capable of doing much better.

Next we fasten a weary glim on another of those "John Carstairs" tales. I yawned half-way through it and gave up in disgust. I can't but wonder if this boring parade of sleep-inducing yarns will ever end.

"The Invincible Wrestler" was fairly good; but, oh! that terrible pun at the end!

That gag is on a par with those distributed by Hopeless Hope, radio's gift to old maids.

All inside illustrations were pretty good. "The Reader Speaks" was good in parts. This Gene Hunter swings an entertaining pen.

Well, Sarge, I guess that's all for now. But don't look so pleased—I'll be back next issue. "Worlds to Come" in the Spring ish of C.F. was swell! As for S.S.'s "Speak of the Devil"; Daniels, you leave me breathless!—2300 16th Ave., So., Minneapolis, Minn.

Between question marks and exclamation points your punctuation eeks out a pretty good exercise, Pee-lot Burgeson. So you didn't like LOTUS JUICE. Well, there has been a bumper crop of lotuses this year, and how do you make out with THE LOTOS EATERS in this present issue? Be sure to eat a handful of lotus—or cactus—yourself before writing in to let me know.

So you scramble your magazines in order to mention CAPTAIN FUTURE and STARTLING STORIES all in one letter, eh? But the old Sarge can't call you down too severely for putting in such a nice plug. Speaking of horses, I like plugs better than nags any day—and that should efface the memory of the said wag at the end of THE INVINCIBLE WRESTLER.

Give heed to this flash.

GET ROCKLYNNE

By Dick Dolan

Dear Sarge: After having read your companion mag #88 and CF and joining The Futuremen I got around to buying the April issue of TWS.

I'm only 14 but ever since I was a kid I always was interested in time travel and all that stuff. You see, I'm a bookworm and I used to get my fingers on many a scienfiction mag. I hope I can join the Science Fiction League.

Anyway, the namestrip and stamped envelope are enclosed.

I don't know much about art work, but that April cover sure was awful. Get Ross Rocklynnne in there, he's the guy that really writes scienfiction.—*JS Circle Drive, Sheridan Circle, Chicopee Falls, Mass.*

The old Sarge thinks you meant to paragraph after the word "awful," Kiwi Dolan. But you didn't, and your spacegram reads as though you want Ross Rocklynnne mixed up in the April cover to improve the paint job by writing ads on the backs of the plug-uglies. Maybe that would pep up the so-called BEMS. "Drink Joe's Jitter Juice." "Buy Your Space Suits At Sam's. They Give You An Air." "Register Your Rockets With Rudy." How'd you like that kind of sandwich boards of space, huh?

Speaking of Ross Rocklynnne, you are finding him in this present issue, pee-lot, and how are you finding him?

Well, shove over to one side; you're blocking the corridor.

ANOTHER DOUBLE-HEADER

By Herman Stein

Dear Sarge: Please accept my membership in the Science Fiction League. I read many scienfiction magazines but I like THRILLING WONDER STORIES and CAPTAIN FUTURE the best. I noticed that CAPTAIN FUTURE is now written by Brett Sterling instead of Edmond Hamilton, but "Words to Come" was swell.

Your April TWS issue was something out of the ordinary. "Pawns of Chaos" thrilled me to the finish, and "Conquest of Venus" also was good. As my finishing sentence, I am authorized by all the other scienfiction readers in my neighborhood to ask you to please publish CAPTAIN FUTURE more times a year.—*\$80 W. Greeshaw, Chicago, Ill.*

Kiwi Stein, you just did get under the wire with your ethergram as a letter to THE READER SPEAKS. It reads more like a fan letter to CAPTAIN FUTURE than anything else. How about writing one now to UNDER OBSERVATION, the department in CF, and talking about the good stories in THRILLING WONDER STORIES? There's nothing like scrambling things up, you know. The old Sarge can stir a swell omelet.

Never mind, you keep plugging after CAPTAIN FUTURE. Maybe we'll do something about expansion when this all-out war effort is over. Meanwhile, keep your nose clean and buy all those pretty little twenty-five War Stamps you can carry.

Comes now another one of those scrambled letters.

TWS AND SATURN IMPROVING

By Gene Hunter

His Excellency, Saturn: I had given up all hope of TWS ever returning to its high place of a decade ago, but it seems it is again on the way up. But good. I shan't judge too quickly, however, because you've been known to disappoint me in the past.

'Tis really hard to pronounce ratings this time—at least for first place. After a terrific internal discussion, I shall award Nelsebond first showing for PAWNS OF CHAOS. Millard's CONQUEST OF VENUS is a great yarn in itself, and is far better than many you've published in either mag in the last two years, and rates just a Mercurian cat-

man's hair's-breadth of being winner. The other two efforts were good but not exceptional. I said the other two. You know from past letters that that doesn't include the John Carstairs thing. Those yarns are in a class by themselves—at the bottom.

And the cover was a masterpiece. Berguy pictures the Venusians just as the reader does upon reading Millard's description of them. The tank's just the least bit blurry, and looks as if it might have been painted there by another artist, although I can't say whose work it looks like.

Interiors not quite so inferior this voyage. Your mag still rates third from the extreme bottom in illustrations.

Say, aren't we ever going to get Paul, Finlay, Leydenfrost, or a few of the other masters? Wake up, you fool, Saturn.

Future wars in the author line: Rocklynnne, Wellman, oodles of Binder and Kuttner, plenty of Bond, Hamilton if possible, more of Millard's Venus series, slight sprinklings of Cummings, but only with novels. Leave his short stuff alone, please.

Save for the reader's column, that takes care of the April number. Will dash over THE READER SPEAKS quickly. Carter and Stoy, per usual, with the best in the section. (Mine was good too.) What army is Mace in—Ye olde squad of the kindergarten? Sadownick is a guy after my own heart. Esp. "Bye-openers." De Fina seems to be a nice guy, and Seville is interesting. Enough!

And Saturn, ol' man, your humor even seems to be improving... You must have just gotten around to turning off those excruciating Tuesday p.m. comedians (??).

Don't get me mixed up with that guy of the same name whose last epistle was penned from Missouri, because I'm him, see.

I close, wishing a happy future for all.—*R. Z, Box 107, Beaverton, Ore.*

The old Sarge is beginning to believe all you junior astrogators are getting behind in your home-work—the way you are scrambling your magazines and departments. What are you trying to do? Save the effort of writing more than one letter? You remind me of that old wheeze about the Scotch traveling salesman who wanted to send a telegram home to his wife. Upon learning that his signature was free, he said to the telegraph operator, "Hoot, mon, would ye believe it, I'm an Indian, and ma name is Iwon'theometill-Friday."

I know, Junior, that's not the way you heard it, but that's the way I'm telling it, see?

You ask about Finlay, among others, Kiwi Hunter. Did you miss my promise last issue that you would see more of Finlay soon? Remember, we don't have artists rush in and draw up these pictures the afternoon we go to press. It'll take a little time for illustrations to seep through. As for the writers you mention, they are here with you, in and out, all the time. Right now Mr. Wellman is doing a book-length for STARTLING STORIES. (There, you little monsters have got me scrambling things again with you.)

HEAT RADIATION

By N. Nielson

Dear Sergeant: This is to praise "The Conquest of Venus" by Joseph J. Millard. It had plot, suspense, sound characterization, and an air of plausibility which, it must be admitted, is not always found in future fiction, as witness some of the hastily written "idea" brainstormers in a competitive magazine.

I was glad to see that no one was instantly frozen to death by being exposed to space in this issue. I may be mistaken, but I believe an object suddenly immersed in the vacuum of space would tend to remain at its original temperature, as no matter would be present to conduct the heat, or otherwise absorb it. At any rate, such heat as would be lost, would be lost through radiation, which would be far from instantaneous. Of course it is cold in Earth's stratosphere because of the great distance from Earth which of course is not without temperature. Also, there is sufficient air present to create dissipation of heat by conduction, the heat being carried away by air currents and

not being replaced. But in space, especially in the vicinity of the sun, one would be inclined to be too warm rather than too cold. Heat would be gained faster than it could be lost due to lack of a circulating medium such as the atmosphere. (This could perhaps be converted to motive power.)

However due to lack of a Xeno vacuum bottle and an Onex thermometer, I must, for the moment, forego further experimentation on this subject.—
N. Nielson, 736 N. Hunter St., Stockton, Calif.

I gather with some difficulty that you found **THE CONQUEST OF VENUS** an okay story, Pee-lot Nielson. Your discourse on heat radiation I am turning over to the refrigeration department. Personally, I never step out into space without my space suit zippered up and the thermal control functioning to maintain a constant seventy degrees, Fahrenheit. Of course, in the winter I use an oil burner because there's no fuel like an oil fuel. Or so the coal adage states. Wooden you gas that?

I have now one more communique which cleans up the anvil chorus on the April issue. This ethergram is from a gal pee-lot.

THE DEPARTMENT FIRST

By Leota Guthrie

Dear Sarge: Am writing my opinion of April issue of **THRILLING WONDER STORIES** first so here goes:

1. "The Conquest of Venus."—Swell! Joe Millard has all the encouragement I can give him. Give us more, Joe.
2. "Pawns of Chaos."—Give us more, Nelson Bond. Certainly it's an untrue fiction tale, but it makes for swell reading.
3. "Lotus Juice."—Again I say swell. It was interesting to the last drop.
4. "The Invincible Wrestler."—Short and sweet.
5. "The Heavy Man."—A good mystery and good reading.

As for the rest of the mag., it was swell. I liked it from cover to cover. I didn't care much for the cover illustration, but it was good work.

Now for the rest of my opinions. My only ob-

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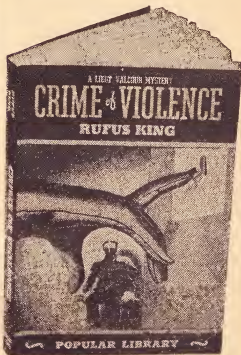
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jection is that TWS isn't bigger. It doesn't last long enough. (Now wait, Sarge! Don't throw your Xeno jug at me. After all, I'm only a dizzy blonde and Xenos is bad for blondes. It makes them see funny things.)

As for one reader calling you a space-warrior, couldn't you think of more to call him than the word space-warrior? I can. I also wonder what a certain private meant by "juniors"? It's not the age that counts but the brain.

I've been reading S.F. mags since I was twelve. That's been for nine years now, and at twenty-one I don't call myself a junior. Even my five-year-old son likes the pictures. I don't know why so many Kiwis and Pee-lots are always grumbling about the pictures and stories. I wonder if they ever tried to write or draw for Science Fiction mags.

After all, you can please some of the people some of the time and some of the people all of the time, all of the people some of the time but not all of the people all of the time. Personally I'm willing to take the bad with the good. After all, Sarge, remember the old saying—"A barking dog never bites." Let them bark but when they do, you just snap and gravel right back and watch them tuck their tails between their legs and run yipping for home.

Personally Sarge, I think you an old Space-dear (and I don't mean deer). Now, Sarge, go easy on the Xeno jug and I'll be looking for your corner in this mag next month. After all what is THRILLING WONDER STORIES without our good old Sergeant Saturn? I always read your department first and would be terribly disappointed if Xeno kept you from appearing.—1768 Shawnee Rd., S.E., Massillon, Ohio.

Well, take that, all you space apes. The old Sarge doesn't care what rockets blast and wild waves roar when he can draw a letter like this one. Kiwi Leota, the old space dog salutes you. And you'd be surprised how much Xeno I can hold, too.

Now, bless my soul—if you misguided space harpies will concede that I have one, but here is the opening barrage on the June issue, and you can hang a halo around my head and call me Saturn, if it isn't from another gal reader. This is a banner day for the old Sarge.

TIES OF STEEL

By Catherine Mack

Dear Sergeant Saturn: I wonder if your other readers were as impressed as I was with D. D. Sharp's story, CHILDREN OF THE GODS, in the June issue of THRILLING WONDER STORIES. Its originality made it outstanding, and inspired the following poem:

TIES OF STEEL

The moon shone bright (twas made of tin);
The stars were hunks of iron.
The lady was a robot gal,
But had no wings to fly on.

The hero's heart beat steadily—
To Anecya was true.
Why did he love the robot gal?
He was a robot, too.

—241 East 16th Street, New York, N. Y.

Not only a gal kiwi, but she slings poetry (of a sort) too. Thanks, Bonny Kate, the old Sarge liked that little yarn also.

Now comes another poet.

GOOD BUT NOT SCIENTIFIC

By Joe Kennedy

Dear Sarge: In the June number of good old TWS you ran a story which the author had dubbed "The Devil's Fiddle." Now am I mistaken or is this pulp-publishers' prodigy supposed to be a Science-Fiction magazine? "The Devil's Fiddle" was anything but S-F. I'll admit it had some good (but slightly shop-worn) ideas; however, it doesn't belong in TWS. Pretty soon you'll be throwing in cowboy stories. Bah! I am disgusted.

To sum up, I include one of my super-colossal, world-shaking poetical masterpieces which happens to be a limerick or something:

A magazine seldom a bore
Began using fantasy more.
But the fans hollered "No!"
This old hog-wash must go!
Or else there is gonna be war."

Well, that's that.—8½ Baker Avenue, Dover, New Jersey.

Okay, Kiwi Kennedy, crawl back into the bolt bin and pull the lid down firmly into place after you. You were warned in LOOKING FORWARD last issue that "The Devil's Fiddle" was going to be off the cold science trail, but that didn't mean that you should leap clear out of the groove yourself. There won't be any cowboy stories in TWS, but that isn't such a bad idea at that. The old Sarge needs a few good wranglers to help him handle all the bull that gets loose in this astrogation chamber. And, besides, everybody doesn't agree with you. Look at this communiqué.

A NEW CONVERT

By C. W. Horton

Dear Sarge: I just read my first issue of TWS—the June issue. Since I am a science-fiction fan I don't know how I've missed it for so long. All in all, the magazine is pretty good. It will be necessary to rate its component parts to really say whether it is good or bad, though.

Stories:
1. "Through the Blackboard." A good story, though inclined to wander and to be vague in parts. Three and a half stars.

2. "Children of the Gods." A fair story. Good idea, but poorly developed. A long story based on this idea would be good. Two stars.

3. "Wabbles in the Moon." A very good story. Its only fault is that it had to appear in an issue which had two long stories so much better than it is. Three stars.

4. "The Devil's Fiddle." Excellent! One of the best I've ever read. Might be a little vague to someone who knew nothing at all about musical history. Give us another like it soon. Four plus stars.

5. "Grief of Bagdad." Poor. Its only redeeming virtue is that it is funny in places. One and a half stars.

6. "Two-timing Man." Tut-tut. Two time machine stories in one issue and following each other! One-half star.

7. "The Golden Temple." Another time machine story. It does have a unique ending, though. Two stars.

8. "World of Living Dead." Fair. Good start, but rather a pious ending which spoiled the story. One and a half stars.

Features: The features and space fillers are good. "The Man of Tomorrow" was a very interesting article.

Inside art: Fair. The illustration with "The Devil's Fiddle" was the best.

Outside art: Good. Have your artists get together on the clothes, though. The inside illustration with "Wabbles in the Moon" showed them in ordinary clothes—the outside in fantastic garments.

Well, Sarge, I guess that covers it all. I'll be looking forward to the next issue.—Auburn, Ala.

Glad you finally discovered TWS, Pee-lot Horton, and can't understand how you missed it so long. There will be other stories in the future by Senor De Mexico, so watch out for them.

Comes now a recurrence of a rash I had last year.

ENCORE

By Yeoman Charles Lee Riddle

Dear Sarge: Remember me? About a year ago this time, I wrote you a letter from Fort Smith, Arkansas, where I was a civilian in those good ole days. If I remember correctly, you headed it "Nutz to Saturn." And I might say, in a year, you haven't changed at all. For that matter, you might still label this letter again "Nutz to Saturn." Amen!

This reddish tint of paper I'm writing this on is somewhat symbolic. I still see red when I see your

miserable, puny, etc., efforts to conduct a reader's column. I still say, cut out the kid stuff, and give us some straight answers for a time being.

I've held my peace for some time, being content to sit on the sidelines and let others make fools of themselves—such as Mr. Clark in the June issue who says, quote: "Your department is one of the best of its type in America," unquote. Ye Gods! I'm glad that I'm not the only one who thinks otherwise. Thanks, Mr. Cohen, for your support in the February issue!

I do have a bouquet to throw your way—now don't faint—it isn't for you, but for one of your authors, Joel Townsley Rogers, to be exact, for his wonderful story "Through the Blackboard." I would like to see more by this author, on this same type. He's really good!

Give up, Sarge? Okay, I'll close for the time being, but you can expect me to be back, breathing on your ear again, but definitely, and soon!—Camp Peary, Va.

Not satisfied with bawling the old Sarge out on pink paper, Kiwi Riddle got a leave from his station and put in a personal appearance in New York, and a salty young tar he is, too. Well, anybody who can space with old Saturn can buck the storms on the high seas—and take the Japanazis in his stride. Good luck to you, Yeoman Riddle.

Here comes dissension from down Florida way.

XENO ANALYSIS

By Ira G. Groll

Dear Sarge: After reading your latest "Thrilling Wonder Stories" I am still wondering why I am not thrilled. Really, Sarge, I expected a little better from those three-eyed space pirates you call writers. "Through the Blackboard" rated about 2 jugs of xeno. "Wobbles in the Moon" wasn't so hot; it gets one jug of xeno.

"The Devil's Fiddle" wasn't even scientification. "Children of the Gods" was terrific; it gets all 4 jugs of xeno.

"Grief of Bagdad," "Two-timing Man," and "The Golden Temple," ought to be burned. "World of Living Dead" is pretty good; it gets 1½ jugs of xeno.

I read STARTLING STORIES this month and I en-

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joyed "Wings of Icarus," but how in the world could earthenmen walk, not alone fly with the gravity of Neptune hundreds of times greater than earth's? Also, Neptune has no atmosphere. I finally found what xeno is. It's a gas! So that's why you're so full of hot air.—1221 Meridian Ave., Miami Beach, Fla.

Tanks for practically nothing at all, Pee-lot Groff. You can climb into the bolt and nut compartment with Kiwi Kennedy. And how come you slip in some stuff about STARTLING STORIES in this ether flash? You junior astrologers are getting a little (more) out of hand. Write your SS complaints to Sergeant Saturn in care of THE ETHER VIBRATES. He'll take ample care of you there. I know him well.

Now, blast my rockets, but here's another communicate from a gal reader:

ANOTHER FAN

By Flora Johns

Dear Sarge: The June issue of THRILLING WONDER STORIES was very good. It is the second issue I have read, but you've got another fan for your magazine. I started with the April issue. What caught my eye was the name of Nelson S. Bond who has long been one of my favorite authors. So I couldn't resist the temptation of buying the magazine—and a new field of literature was opened up to me.

The June issue carried on what the April issue started, but one story wasn't as good, to my taste, as I had anticipated. "Through the Blackboard" I rate as only the second best in the issue. The best story was "The Devil's Piddle." Maybe that was because the author knows about the subject matter so well.

"Children of the Gods" and "Two-Timing Man" tie for third place. "World of Living Dead" wasn't too good, though it was better than the other two shorts, which could have been left out without the magazine suffering from the omission.

I can hardly wait for the next issue.—Springfield Gardens, N. Y.

Bless your heart, Kiwi-ess Flora, for all them kind words. I hope the old Sarge doesn't disappoint you too much in the future. But then you can always brighten up the corner where you are by writing in and giving the old space dog a good polishing off.

A few comments now from the land of the Ford.

COVER OKAY

By Kent Bone

Dear Sarge:

When I saw that Wilim Carver can really write. After reading his story "World of Living Dead" I forgot what time it was. Even if it was like the Hall of Fame story "The Super Velocitor" it was good. The way it started out I thought it would have a better ending.

Ray Cummings is one of my favorite authors, but this time he fell flat, with his face in a puddle of Xeno. In other words, "The Golden Temple" was rrrrotten.

"Two-Timing Man," by Thaedra Alden, was a good yarn. There are a lot of Time-machine stories in science-fiction mags. I get kind of sick of them sometimes. This yarn was different so I liked it better than some.

This month Pete Manx's story was funny in some parts, and phony in others. Even though it was a little phony in some parts, I think it is the best Pete Manx story yet. "The Grief of Bagdad" is a good little. Kelvin Kent is a good author, one of my sub-favorites.

D. D. Sharp is a good author. Even though I have read only a few of his stories, I think he is an excellent author. I hope he writes some more stories for TWS, better ones.

Ahhhhhhhh! Yup, that's it. "Wobbles in the Moon" is the best Carstairs novelet so far this year. It was very much better than "The Heavy Man." I hope Long gets some more good ideas like this.

Gulp! Nope, I'm not drinking any Xeno, I'm just

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getting the lump out of my throat after reading "The Devil's Fiddle." N. R. de Mexico is what I call a good author. That guy was sort of dumb not to know who that seven-foot guy was, though.

"Through the Blackboard," by Joel Townsley Rogers, was fair. It got a little boring in some parts though. I have been reading a lot of stories about time standing still in SS, TWS, and CF.

The cover was O.K. Bergey has been doing some good ones lately. June issues always seem to have good covers.

The Reader Speaks was very good. Gee, Sarge, do you really think Bertram Cohen has repented?

Say, Sarge, did you ever hear of Jehu juice. It comes from the Jehona weed on Jeipo Asteroids in the Jeipian System. It's not as good as Xeno though.—2577 Ferris Ave., Detroit, Michigan.

Never mind trying to get the old Sarge to mix his drinks, Pee-lot Bone; it's tough enough to mix things up with you space monkeys here in the astrogation chamber. Xeno is good enough for me.

Sure, Kiwi Cohen has returned to the fold. Didn't you read his letter in the June issue? There have been half a dozen new flare-ups since then. But the old Sarge loves every one of his junior astrogators. (Somebody has to love you little pests.)

All of which brings us to another wild jeep rider. So we'll finish off this month's tirade with a rocket blast from another sergeant who knows more about jeeps than the old Sarge.

WONDERS OF SCIENCE

By Sgt. Jerry A. Mace

Dear Sarge: Well, here it is, April in Kentucky and June in T.W.S.—the wonders of science are indeed endless.

Leaving our wonderment to the tender mercies of the Xeno jug we lope along with mouth agape and all jets squirting ribbons of flame to circle once over the cover, noting as we pass that dauber Bergey has created an astounding likeness of our mother-in-law—even to the armor-plated chest. The only difference being that the Wobblies' peepers have a gleam of intelligence in them. In the foreground stands our nomination for "Sweater Girl of 2043." Bergey has been around. . .

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With a quick pull at the jug and a blast of our port rockets we dodge the Space Patrol and glide to a smooth landing right on the G string of "The Devil's Fiddle." Others may (and probably will) raise their voices in howls of anguish and needlessly point out that this yarn is purely fantasy and as such is an unwelcome intruder to the hallowed pages of Stf. Of course, De Mexico might have issued ray guns to the characters involved and placed an alien intelligence from outer space somewhere in the fiddle whilst our hero rassled robots 'n' stuff between concerts, but that would only have cheapened the yarn, while as it stands it ranks with us as being one of the finest to appear in any mag., fantasy or Stf. and any space bum who would like to argue the matter will find us in the asteroid belt ready to start throwing rocks. Do us all a favor, Sarge, and convince De Mexico that one good yarn deserves another.

For the remainder, "Through the Blackboard" was worthy of praise along with "Wobblies in the Moon." These are tales which restore our enthusiasm for Stf. and we might mention that it needed restoration after attempting to read the latest **STARTLING STORIES** which was peculiarly putrid. We once took a course in monotony while in school but even so found it difficult to digest that tripe. By the way, Sarge, your review of fan publications in S.S. is veeeeeey funny. At that you would make a better fan than some of these space harpies.

The shorts were passably fair—even Cummings was readable, though Kent seems to have developed a screwtube and is headed for an ether whorl. Thaedra Alden (hmm) rang the bell with her initial attempt, and so we will refrain from making any comment on her choice of a moniker. (Thaedra—hmm.)

The article "Man of Tomorrow" was slightly superfluous since we are all aware of the fact that the average man leaves much to be desired and what can you do about it? There will always be a certain amount of jerks at any clambake.

As for "The Reader Speaks," we note a steady influx of characters who have something to say and know how to say it. No doubt they were attracted from afar by the Xeno fumes and the din of heads being cracked by the old Space Dog. Anyway, it's a good omen.

To those who continue to lament the absence of trimmed edges we suggest that they drop those paper dolls and apply the shears instead to the mag. And just who the H— is we? Why, me and Napoleon, of course!—Fort Knox, Ky.

Maybe it is taking a sneaking advantage of you space warps to end this department on a happy note such as Kiwi Mace contributes, and I know you won't believe me when I say it, but I'll swear I didn't know what was coming out of the mad Mace when I scheduled his letter for the last rocket blast to coast us on home.

Anyway, the old Sarge thinks it is a good letter, and to heck with all you junior astrologers who don't think so. Take over now, you little space devils, and tear the entrails out of this August issue. I'll play space surgeon next trip. Until then, happy stuff to all you sun imps.

—SERGEANT SATURN.

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LOOKING FORWARD (Continued from page 10)

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Stories Ahead

Looking forward to the next issue of **THRILLING WONDER STORIES**, I find there are three splendid headlines coming up to head the parade. The first one is called **DAYMARE**, by Fredric Brown, a stirring short novel of a trouble-shooting detective of the future. The events which take place in this story could only take place in an advanced time from the present. This story is so vividly written that you won't forget it in a hurry.

The featured novelet is **PERIL ON PHOEBUS**, by Nelson S. Bond. This is a story of spatial exploration and pioneering by members of the Interplanetary Patrol which will grip your attention and imagination and hold you riveted to your seat.

The next headliner reverses the arena of action and brings **THE MAN FROM THE STARS**, by Robert Moore Williams, to Earth for an amazing and thrilling adventure. And, before I leave the subject, let me mention that one of our Amateur Prize Contest stories will also be included in the October issue. **THE BUBBLE PEOPLE**, by James Henry Carlisle, III, is a chapter in the history of ancient Mars.

Amateur Story Contest

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[Turn page]

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runs continually and welcomes the submission of stories by our readers. The rules of the contest are simple. Just type out your story in any length up to six thousand words on one side of standard white paper, double-spacing your lines and leaving about a one-inch margin around the border. Choose any subject you please and inject the scientification angle into it. That's all. The only qualification necessary is that you have never sold a story before.

Address your manuscript to the Amateur Story Contest Editor, **THRILLING WONDER STORIES**, 10 East 40th Street, New York, N. Y. The prize is payment for winners at our regular rates. I hope to have a nice list of winners to announce next issue.

Best Science Fiction

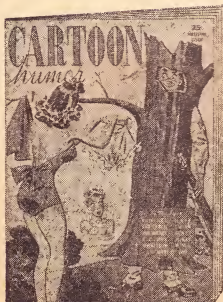
Before I turn you over to the gentle mercies of Sergeant Saturn to iron out the kinks of the June issue, let me remind you that **THRILLING WONDER STORIES** has a pair of companion magazines in the realm of fantasy and of future science—**STARTLING STORIES** and **CAPTAIN FUTURE**. Between the three of them, these magazines bring you every type of wonder fiction and fact in every length from short items to book-length novels.

And now, if you will head for the astrogration chamber I think you will find the old Sarge awaiting you!

—THE EDITOR.

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THE STORY BEHIND THE STORY

YOU know, stories come into being in astonishingly different ways. Plots have their inception sometimes when you have the least warning. Many an author has been caught in a cul de sac and has, for instance, sat down with a sympathetic friend to listen and has started telling his difficulty with the mere intention of clarifying matters for himself, only to have the non-writing friend make a simple suggestion that magically resolves the problem for him.



In such a way was our leading novel in this issue brought into focus. Read what Ross Rocklynne has to say about **EXILE TO CENTAURI**.

Discussion, I'll venture, has started more science-fiction stories on the way than a hard, two-fisted slug-fest of thoughts in the writer's brain. It's the easier way, too, for the latter method sometimes results in a straining and panting which approaches in futility the effort to lift oneself by the bootstraps. The impetus of an outside thought, on the other hand, starts the mental gears to working, and often I have received just such an impetus. **EXILE TO CENTAURI** more than illustrates the point. The story started when Frances corralled me, seated me, lighted me a cigarette, curled herself up on the davenport, and told me to go ahead.

"There's a man on a yacht," I blurted out. "Sick," she took it up, and flung it back to me with, "He's the son of an inventor. Only he's not really sick. He thinks he is. Go ahead."

"He's got some plans for some kind of a machine that his father entrusted him with."

"Plans for what?" she prodded. "Remember, there's a war going on. Why don't you stop the war? What could be better? Make it timely. What's science-fiction for, if it can't stop war?"

was her logic at this time, but I floundered. "Stop the war, then," she went on, feeling very sorry for me, and also really wanting to stop the war, for she felt the cold and the hunger and the misery of all the conquered peoples most keenly. "Only take your hero to another planet, because there's been too much dictator stuff already, and have him solve a problem there . . . and then come back."

"But first he's on this yacht . . . a plane lands on the water. In it is his father's patent attorney, who has a machine which—which transports things the way a radio wave is broadcast. That's a logical machine, isn't it? Let's call it a telematerio—tele for 'at a distance' and materio for 'matter.'"

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"Let's," I said feebly, disappointed in myself, and smoking hard.

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"An image-projector?" I said, brightening, and so our "discussion" ends and "we" have thought up another story, and all I have to do is to fill in the middle, which I do. But there was something very wrong with that middle, and the editor of THRILLING WONDER STORIES, upon seeing the outline, put his finger on what was wrong, and gave me some very concrete and usable suggestions, which resulted in the finished yarn.

In suchwise was EXILE TO CENTAURI written, and in it, or implied therein, I stop the war. What's stf for if it can't do that—as Frances says.

—Ross Rocklynne.

THE LOTOS EATERS

As we prophesied last issue, the featured novelet this trip is a story that is off the trail in its style. Without being highly scientific, it is vivid and gripping mostly because of the manner of its telling. If you have already read THE LOTOS EATERS, read now what the author, Bolling Branham, has to say about the genesis of the story. If you haven't yet read it, read Mr. Branham's letter and prepare yourself for a well-told tale.

The idea behind "The Lotos Eaters" had been with me for many a year, I think, before I ever got down to writing the actual story. Ever since I first read the "Odyssey" as a small boy, there had been something vaguely haunting to me about this land of men who had lost their willpower.

But, like most other story ideas, I believe, it had lain dormant for many a year, collecting brain-dust and various impedimenta . . . some of it that would be good when the time came to write . . . other material just trash to be discarded. Tennyson's poem, with its vivid imagery, was what awakened this sleeping—I shall resist the desire to call it beauty, and settle for idea.

Even then I folded the idea away in my head for nearly a year, before it got ripe enough to blossom, and once I began, the story wrote easier than almost any other I had ever done. It was a real pleasure to write. Actually.

I have some ideas on science-fiction in general, but have been hesitating about sticking my neck out. But I shall risk it for a small distance.

It is my humble contention that a science-fiction story—just as any other story—has a definite obligation to fulfill first of all; the obligation of entertaining the reader. As a science-fiction fan of a dozen years, I have forgiven I don't know how many authors many grievous errors simply because their story was entertaining. This doesn't excuse errors; far from it, for their stories would have been vastly improved had they taken the errors out.

The matter of entertainment, of course, is quite vague, and ties in with so many things such as originality, unusualness, etc., and the varying tastes of the reader, that it is useless to discuss it with a limit less than fifty thousand words.

But, in general, I believe that it consists partially of keeping the human element in the story. The problem story is good, but it is good mainly because there is a mind to work it out. I for one, object to taking the romance out of stf. I do not mean women, in particular, but more the spirit of adventure that is in man. Perhaps I could explain

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better if I drew attention to Weinbaum's writings. He was the greatest modern success at stf., and isn't there some indefinable aroma and spirit of high adventure about his stories?

But enough of that. As for myself, I crawled over my twenty-first birthday not so long ago, and have been a science-fiction fan practically since I could read, and have been stabbing around in the dark with writing for the past five years. Did a tour of active duty with the Naval Reserve in 1940, which is where I got any knowledge I may have of the Navy, have worked at almost as many jobs as most of these other writers, once worked on a weekly newspaper and finally found myself writing it all... and through it all, I managed to go to three or four colleges in various parts of the country, and finally graduated from one of them in the deep South, with an English major and Chemistry minor. That appeared to be a good set-up for a stf. writer. At present, I am employed as a draftsman in an aircraft factory on the West coast.

Well, that's that, and I hope you enjoy "The Lotus Eaters," for after all, as I say, I *did* write it to entertain.

—Bolling Branham.

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